SEARCH REQUEST FORM

61148

Scientific and Technical Information Center

Requester's Full Name: Robert D Willy Examiner #: 78393 Date: 2/26/02

Art Unit: 1616 Phone Number 30 8-2411 Serial Number: 09/840322

Mail Box and Bldg/Room Location: 2B03 Results Format Preferred (circle): PAPER DISK E-MAIL

2099

If more than one search is submitted, please prioritize searches in order of need.

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Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

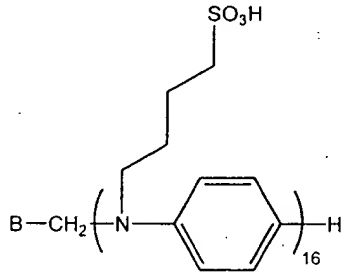
Inventors (please provide full names): _____

_____

Earliest Priority Filing Date: _____

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search the below compound in Conjunction with Inhibiting Growth Tumor Cells.



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STAFF USE ONLY	Type of Search	Vendors and cost where applicable
Searcher: Point of Contact: Sheppard	NA Sequence (#)_____	STN _____
Searcher Phone #: _____	AA Sequence (#)_____	Dialog _____
Searcher Location: tel: 308-4499	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up: _____	Bibliographic _____	Dr.Link _____
Date Completed: 3/1/02	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time. _____	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: _____	Other _____	Other (specify)_____

PTO-1590 (1-2000)

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FILE 'HCAPLUS' ENTERED AT 20:34:04 ON 01 MAR 2002
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FILE COVERS 1907 - 1 Mar 2002 VOL 136 ISS 10
FILE LAST UPDATED: 28 Feb 2002 (20020228/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the CAS files between 12/27/01 and 1/23/02. As of 1/23/02, the situation has been resolved. Searches and/or SDIs in the H/Z/CA/CAplus files incorporating CAS Registry Numbers with the P indicator executed between 12/27/01 and 1/23/02 may be incomplete. See the NEWS message on this topic for more information.

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=> d stat que 127
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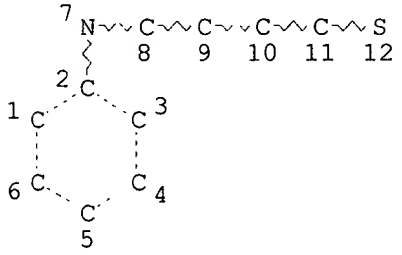
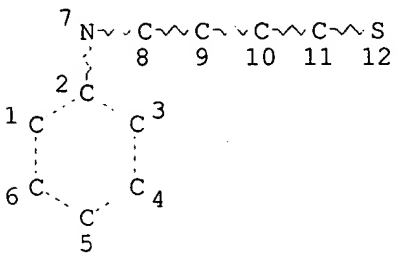


NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE
L15 1335 SEA FILE=REGISTRY SSS FUL L14
L16 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE
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=> d ibib abs hitrn l27 1

L27 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:509200 HCAPLUS
DOCUMENT NUMBER: 129:149097
TITLE: Preparation of boronic acid derivatives and pharmaceutical compositions useful as angiogenesis **inhibitors**
INVENTOR(S): Cordi, Alex; Desos, Patrice; Atassi, Ghanem; Pierre, Alain
PATENT ASSIGNEE(S): Adir et Cie., Fr.
SOURCE: PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9831688	A1	19980723	WO 1998-FR89	19980119
W: AU, BR, CA, CN, HU, JP, NO, NZ, PL, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
FR 2758560	A1	19980724	FR 1997-525	19970120
FR 2758560	B1	20000204		
AU 9859930	A1	19980807	AU 1998-59930	19980119

ZA 9800440 A 19980729 ZA 1998-440 19980120
PRIORITY APPLN. INFO.: FR 1997-525 A 19970120
WO 1998-FR89 W 19980119
OTHER SOURCE(S): CASREACT 129:149097; MARPAT 129:149097
AB The invention concerns the prepn. and pharmacol. usefulness of (R3Y)2BA4C6H2A2NRaXA1XNRbA3C6H2A'4B(Y'R'3)2 (R1, R2, R'1, R'2 = H, halogen, C1-6 alkyl, C1-6 alkoxy, hydroxy, nitro, trihalomethyl; or R1 and R2 (or R'1 and R'2) form together with the benzene nucleus which bears them a naphthyl or anthracenyl group; X = C:T, SO2, CH2, or X-A1-X = C(T)NHA1NHC(T) (T = O, S); Y, Y' = O, NR4 (R4 = H, C1-6 alkyl); A1 = C1-20 alkylene chain with 0-6 double bonds in which .gtoreq.1 CH2 groups are replaced by O, S, CF2, phenylene, naphthylene, anthracenylene, cycloalkylene, 1,4-piperazinediyl, etc.; A2, A3 = C1-6 alkylene group or single bond; A4, A'4 = single bond, C1-6 alkylene group contingently substituted by .gtoreq.1 halogen, OH, C1-6 alkoxy or O, CH:CH; R3, R'3 = H, C1-6 alkyl or YR3 (Y'R'3) with boron forms a ring; Ra, Rb = H, C1-6 alkyl). The invention also concerns isomers as well as additive salts to a pharmaceutically acceptable base. In an example prepn., 4-(HO)2BC6H4NHC(O)(CH2)8C(O)NHC6H4B(OH)2-4 was prepd. by base hydrolysis of its 1,3-propanediol ester, which in turn was prepd. from sebacoyl chloride in MeCN by addn. of pyridine dropwise followed by the 1,3-propanediol ester of 4-aminophenylboronic acid. The above compds. are useful as angiogenesis **inhibitors**. Expts. are reported indicating that the compds. are powerful **inhibitors** of proliferation of endothelial cells and that they **inhibit** growth of M 5076 sarcoma in mice.
IT **210907-57-6P**, Bis(3-((3-boronophenyl)carbamoyl)propyl) disulfide
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of boronic acid derivs. and pharmaceutical compns. useful as angiogenesis **inhibitors**)

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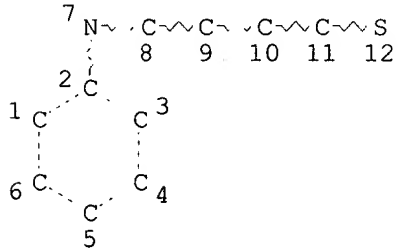
=> d stat que l28
L14 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

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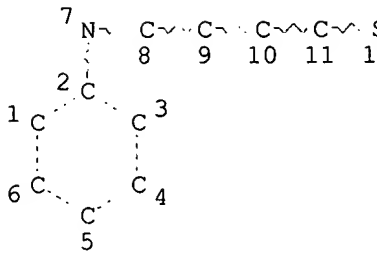


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NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  13

STEREO ATTRIBUTES: NONE
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L24           11 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L23 AND L20
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L27            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L26 AND (?INHIBIT? OR ?TUMOR?
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L28            4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L25 NOT L27


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=> d ibib abs hitrn l28 1-4

L28  ANSWER 1 OF 4  HCAPLUS  COPYRIGHT 2002 ACS
ACCESSION NUMBER:         2000:169388  HCAPLUS
DOCUMENT NUMBER:          132:208142
TITLE:                    Preparation of peptides as matrix metalloprotease
                          inhibitors
INVENTOR(S):              Castelhano, Arlindo Lucas; Bender, Steven Lee; Deal,
                          Judith Gail; Horne, Stephen; Liak, Teng J.; Yuan,
                          Zhengyu
PATENT ASSIGNEE(S):       Syntex (U.S.A.) Inc., USA
SOURCE:                   U.S., 42 pp., Cont.-in-part of U.S. Ser. No. 147,811,
                          abandoned.
                          CODEN: USXXAM
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   3
PATENT INFORMATION:
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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6037472	A	20000314	US 1994-343158	19941122
CA 2175667	AA	19950511	CA 1994-2175667	19941103
ZA 9408691	A	19960503	ZA 1994-8691	19941103
CN 1134153	A	19961023	CN 1994-194001	19941103
CN 1044249	B	19990721		
HU 74730	A2	19970228	HU 1996-1154	19941103
AT 155471	E	19970815	AT 1994-932023	19941103
ES 2105783	T3	19971016	ES 1994-932023	19941103
CZ 287642	B6	20010117	CZ 1996-1260	19941103
WO 9616027	A1	19960530	WO 1995-US15530	19951121
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9642897	A1	19960617	AU 1996-42897	19951121
AU 705439	B2	19990520		
EP 793643	A1	19970910	EP 1995-941493	19951121
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
BR 9509802	A	19970930	BR 1995-9802	19951121
CN 1173170	A	19980211	CN 1995-197409	19951121
HU 77533	A2	19980528	HU 1997-1970	19951121
JP 10509719	T2	19980922	JP 1996-517109	19951121
RU 2163232	C2	20010220	RU 1997-110062	19951121
ZA 9509948	A	19970522	ZA 1995-9948	19951122
FI 9702160	A	19970522	FI 1997-2160	19970521
NO 9702307	A	19970722	NO 1997-2307	19970521

PRIORITY APPLN. INFO.: US 1993-147811 B2 19931104
US 1994-343158 A 19941122
WO 1995-US15530 W 19951121

OTHER SOURCE(S): MARPAT 132:208142

AB Peptides R1CH2CH(XR2)CONHCHR3CONH(CH2)pR7 [R1 = SH, AcS, CO2H, hydroxycarbamoyl, N-hydroxyformamide, alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, benzyloxycarbamoyl, or P(O)(OH)CH2SR6, where R6 = aryl, pyridyl, or thiazolyl; R2 = biphenyl; R3 = alkyl, cycloalkyl, aralkyl, alkylpyridyl, or alkylthiazolyl; R7 = 4-pyridyl or optionally substituted phenyl; p = 0; X = (CH2)mY(CH2)n, where Y = O, S, or single bond, m, n = 0-4 (m + n = 0-4)] and their pharmaceutically acceptable salts were prepd. The peptides **inhibit** matrix metalloproteases such as stromelysin, gelatinase, matrilysin and collagenase and are useful in the treatment of mammals having disease states alleviated by the **inhibition** of such matrix metalloproteases. Thus, N-[2R-[(tert-butoxycarbonyl)methyl]-5-(4-biphenylyl)pentanoyl]-D(or L)-.beta.-hydroxyvaline-N'-phenylcarboxamide was prepd. via coupling of DL-.beta.-hydroxyvaline-N'-phenylcarboxamide with the substituted pentanoic acid, with sepn. of the diastereomers by radial chromatog.

IT **5467-74-3**, 4-Bromophenylboronic acid
RL: RCT (Reactant)
(prepn. of peptides as matrix metalloprotease **inhibitors**)

IT **169322-28-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of peptides as matrix metalloprotease **inhibitors**)

REFERENCE COUNT: 73 THERE ARE 73 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:405112 HCAPLUS
DOCUMENT NUMBER: 131:56155
TITLE: Methods for the simultaneous identification of novel biological targets and lead structures for drug development using combinatorial libraries and probes
INVENTOR(S): Heefner, Donald L.; Zepp, Charles M.; Gao, Yun; Jones, Steven W.
PATENT ASSIGNEE(S): Sepracor Inc., USA
SOURCE: PCT Int. Appl., 125 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9931267	A1	19990624	WO 1998-US26894	19981218
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9919256	A1	19990705	AU 1999-19256	19981218
EP 1049796	A1	20001108	EP 1998-964053	19981218
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.: US 1997-68035 P 19971218
WO 1998-US26894 W 19981218

AB The combinatorial screening assays and detection methods of the present invention encompass highly diversified libraries of compds. which act as fingerprints to allow for the identification of specific mol. differences existing between biol. samples. The combinatorial screening assay and detection methods of the present invention utilize highly diversified libraries of compds. to interrogate and characterize complex mixts. in order to identify specific mol. differences existing between biol. samples, which may serve as targets for diagnosis of development of therapeutics. The invention is base, in part, on the design of sensitive, rapid, homogeneous assay systems that permit the evaluation, interrogation, and characterization of samples using complex, highly diversified libraries of mol. probes. The ability to run the high throughput assays in a homogeneous format increases sensitivity of screening. In addn., the homogeneous format allows the mols. which interact to maintain their native or active conformations. Moreover, the homogeneous assay systems of the invention utilize robust detection systems that do not require sepn. steps for detection of reaction products. The assays of the invention can be used for diagnostics, drug screening and discovery, target-driven discover, and in the field of proteomics and genomics for the identification of disease markers and drug targets.

IT **121086-10-0**, BODIPY FL-NAPS **135243-34-4**, BODIPY FL PPHT **137759-83-2** **151736-99-1**, Cholesteryl-BODIPY FL C12 **175799-93-6**, BODIPY FL-prazosin **212116-60-4**, BODIPY FL-forskolin **216483-91-9**, Ro 1986-BODIPY **216483-92-0**,

BODIPY FL-amiloride **216571-97-0**, BODIPY FL-ABT **216571-99-2**, BODIPY FL-thapsigargin **216572-00-8**, BODIPY FL-X ryanodine **217189-42-9**, (+)-DM-BODIPY dihydropyridine **217189-43-0**, (-)-DM-BODIPY dihydropyridine **217189-44-1**, BODIPY FL C12-galactocerebroside **228265-61-0**, BODIPY FL pirenzepine **228265-62-1**, BODIPY FL-CGP 12177 **228265-63-2**, BODIPY FL C12-MPP **228265-94-9**, BODIPY FL-Sch 23390
RL: ARG (Analytical reagent use); ARU (Analytical role, unclassified); BPR (Biological process); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)
(identification of novel biol. targets and lead structures for drug development using combinatorial libraries and probes)

IT **228112-32-1**
RL: ARU (Analytical role, unclassified); BPR (Biological process); ANST (Analytical study); BIOL (Biological study); PROC (Process)
(identification of novel biol. targets and lead structures for drug development using combinatorial libraries and probes)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:476742 HCAPLUS
DOCUMENT NUMBER: 125:143320
TITLE: Prepn. of peptides as matrix metalloprotease **inhibitors**
INVENTOR(S): Castelhano, Arlindo L.; Bender, Steven L.; Deal, Judith G.; Horne, Stephen; Liak, Teng J.; Yuan, Zhengyu
PATENT ASSIGNEE(S): Syntex (U.S.A.) Inc., USA; Agouron Pharmaceuticals, Inc.
SOURCE: PCT Int. Appl., 152 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9616027	A1	19960530	WO 1995-US15530	19951121
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RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 6037472	A	20000314	US 1994-343158	19941122
AU 9642897	A1	19960617	AU 1996-42897	19951121
AU 705439	B2	19990520		
EP 793643	A1	19970910	EP 1995-941493	19951121
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
BR 9509802	A	19970930	BR 1995-9802	19951121
JP 10509719	T2	19980922	JP 1996-517109	19951121
RU 2163232	C2	20010220	RU 1997-110062	19951121
FI 9702160	A	19970522	FI 1997-2160	19970521
NO 9702307	A	19970722	NO 1997-2307	19970521

PRIORITY APPLN. INFO.: US 1994-343158 A 19941122
US 1993-147811 B2 19931104

WO 1995-US15530 W 19951121

OTHER SOURCE(S): MARPAT 125:143320

AB Peptides R1CH2CH(XR2)CONHCHR3CONH(CH2)pR7 [R1 = SH, AcS, CO2H, etc.; R2 = alkyl, cycloalkyl, aryl, heterocycloalkyl, heteroaryl; R3 = alkyl, cycloalkyl, aralkyl, heteroaralkyl; R7 = aryl, heteroaryl, heterocycloalkyl; p = 0-4; X = (CH2)mY(CH2)n, where Y = O, S, or single bond, m, n = 0-4 (m + n = 0-4)] and their pharmaceutically acceptable salts were prepd. The peptides **inhibit** matrix metalloproteases such as stromelysin, gelatinase, matrilysin and collagenase and are useful in the treatment of mammals having disease states alleviated by the **inhibition** of such matrix metalloproteases. Thus, N-[2R-[(tert-butoxycarbonyl)methyl]-5-(4-biphenylyl)pentanoyl]-D(or L)-.beta.-hydroxyvaline-N'-phenylcarboxamide was prepd. via coupling of DL-.beta.-hydroxyvaline-N'-phenylcarboxamide with the substituted pentanoic acid, with sepn. of the diastereomers by radial chromatog.

IT **5467-74-3**, 4-Bromophenylboronic acid
RL: RCT (Reactant)
(prepn. of peptides as matrix metalloprotease **inhibitors**)

IT **169322-28-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of peptides as matrix metalloprotease **inhibitors**)

L28 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1989:549336 HCAPLUS

DOCUMENT NUMBER: 111:149336

TITLE: Structural analysis of specificity: .alpha.-lytic protease complexes with analogs of reaction intermediates

AUTHOR(S): Bone, Roger; Frank, Dan; Kettner, Charles A.; Agard, David A.

CORPORATE SOURCE: Howard Hughes Med. Inst., Univ. California, San Francisco, CA, 94143-0048, USA

SOURCE: Biochemistry (1989), 28(19), 7600-9
CODEN: BICHAW; ISSN: 0006-2960

DOCUMENT TYPE: Journal

LANGUAGE: English

AB To better understand the structural basis of enzyme specificity, the structures of complexes formed between .alpha.-lytic protease, an extracellular serine protease of Lysobacter enzymogenes, and 5 **inhibitory** peptide boronic acids [R2-boroX, where R2 is methoxysuccinyl-Ala-Ala-Pro- and boroX is the .alpha.-aminoboronic acid analog of alanine (Ala), valine (Val), isoleucine (Ile), norleucine (Nle), or phenylalanine (Phe)] were studied at high resoln. by x-ray crystallog. The enzyme has primary specificity for Ala in the P1 position of peptide substrates with catalytic efficiency decreasing with increasing side-chain vol. Enzyme affinity for **inhibitors** with boroVal, boroIle, and boroPhe residues was much higher than expected on the basis of the catalytic efficiencies of homologous substrates. Covalent tetrahedral adducts were formed between the active-site serine and the boronic acid moieties of R2-boroAla, R2-boroVal, R2-boroIle and R2-boroNle. Although R2-boroVal is a slowly bound **inhibitor** and R2-boroAla is rapidly bound, there appeared to be no structural differences that could account for slow binding. The removal from soln. of 20% more hydrophobic surface on binding accounted for the improved affinity of .alpha.-lytic protease for R2-boroVal relative to R2-boroAla. The high affinity of the enzyme for R2-boroIle derived from the selective binding of the L-allo stereoisomer of the boroIle residue, which could avoid bad steric interactions in the binding pocket. Although R2-boroNle buried as much hydrophobic surface as R2-boroVal, its larger side-chain caused

alterations in enzyme conformation and **inhibitor** position, leading to a distortion of H-bonds between the enzyme and **inhibitor**. A trigonal adduct was formed between the active site serine and the boronic acid moiety of R2-boroPhe in which the catalytic histidine occupied a position axial to the plane of the trigonal adduct. The histidine N.epsilon.2 atom was 2.2 .ANG. from the B atom, suggesting that a coordinate covalent bond was formed.

IT **94293-78-4 97532-27-9 97590-10-8**
97590-11-9 122722-99-0
RL: BIOL (Biological study)
(alpha-lytic protease binding of, selectivity of, structure in relation to)

IT **72682-73-6**
RL: RCT (Reactant)
(reaction of, with .alpha.-lytic protease, kinetics of, structure in relation to)

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E1 THROUGH E1 ASSIGNED

E2 THROUGH E28 ASSIGNED

=> fil reg
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DICTIONARY FILE UPDATES: 28 FEB 2002 HIGHEST RN 397241-73-5

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the H/Z/CA/CAplus files between 12/27/01 and 1/23/02. Use of the P indicator in online and SDI searches during this period, either directly appended to a CAS Registry Number or by qualifying an L-number with /P, may have yielded incomplete results. As of 1/23/02, the situation has been resolved. Also, note that searches conducted using the PREP role indicator were not affected.

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=>

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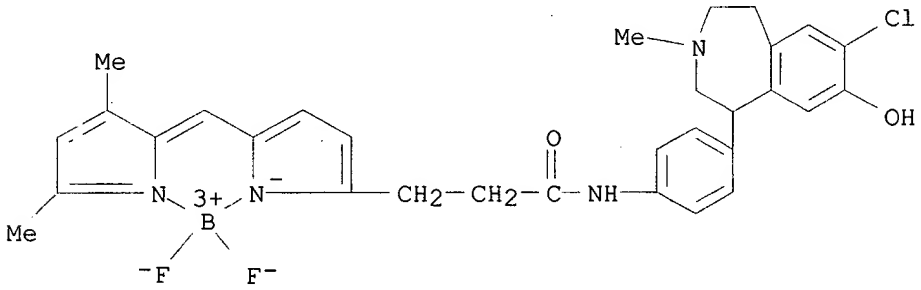
L29 ANSWER 1 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **228265-94-9** REGISTRY
CN Boron, [N-[4-[(1R)-7-chloro-2,3,4,5-tetrahydro-8-hydroxy-3-methyl-1H-3-benzazepin-1-yl]phenyl]-5-[(3,5-dimethyl-2H-pyrrol-2-ylidene-.kappa.N)methyl]-1H-pyrrole-2-propanamidato-.kappa.N1]difluoro-, (T-4)-(9CI) (CA INDEX NAME)
OTHER NAMES:
CN BODIPY FL-Sch 23390
MF C31 H32 B Cl F2 N4 O2
CI CCS
SR CA
LC STN Files: BIOSIS, CA, CAPLUS, CHEMCATS, TOXCENTER



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2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:56155

L29 ANSWER 2 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **228265-63-2** REGISTRY
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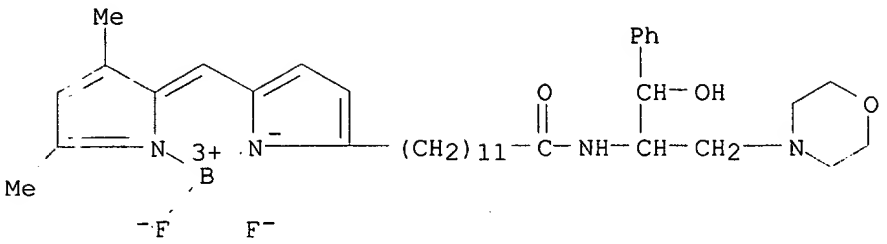
OTHER NAMES:
CN BODIPY FL C12-MPP
MF C36 H51 B F2 N4 O3 . Cl H
CI CCS
SR CA

LC STN Files: CA, CAPLUS, TOXCENTER



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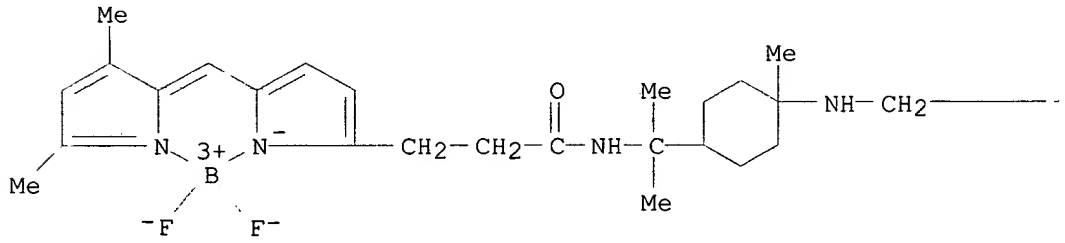
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:56155

L29 ANSWER 3 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **228265-62-1** REGISTRY
CN Boron, [N-[1-[4-[[3-[(2,3-dihydro-2-oxo-1H-benzimidazol-4-yl)oxy]-2-hydroxypropyl]amino]-4-methylcyclohexyl]-1-methylethyl]-5-[(3,5-dimethyl-2H-pyrrol-2-ylidene-.kappa.N)methyl]-1H-pyrrole-2-propanamidato-.kappa.N1]difluoro-, (T-4)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN BODIPY FL-CGP 12177
MF C34 H45 B F2 N6 O4
CI CCS
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

PAGE 1-A



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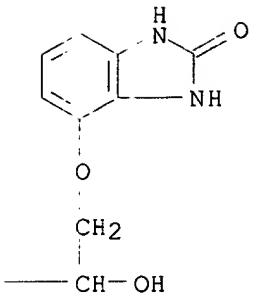

1 REFERENCES IN FILE CA (1967 TO DATE)
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REFERENCE 1: 131:56155

L29 ANSWER 4 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **228265-61-0** REGISTRY
CN Boron, [N-[5-[4-[2-(5,6-dihydro-6-oxo-11H-pyrido[2,3-b][1,4]benzodiazepin-11-yl)-2-oxoethyl]-1-piperazinyl]pentyl]-5-[(3,5-dimethyl-2H-pyrrol-2-ylidene-.kappa.N)methyl]-1H-pyrrole-2-propanamidato-.kappa.N1]difluoro-, dihydrochloride, (T-4)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN BODIPY FL pirenzepine
MF C37 H43 B F2 N8 O3 . 2 Cl H
CI CCS
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

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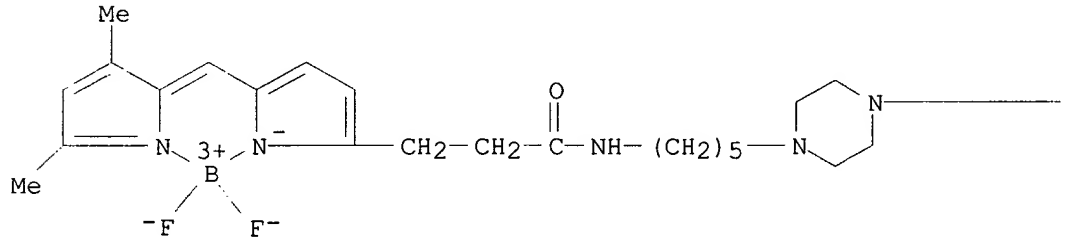

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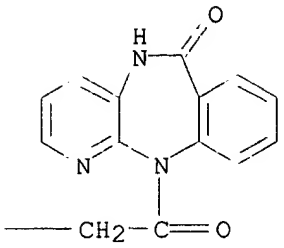

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:56155

L29 ANSWER 5 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **228112-32-1** REGISTRY
CN L-Tyrosine, N-[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)amino]thioxomethyl]-L-methionyl-2-aminobenzoyl- (9CI) (CA INDEX NAME)
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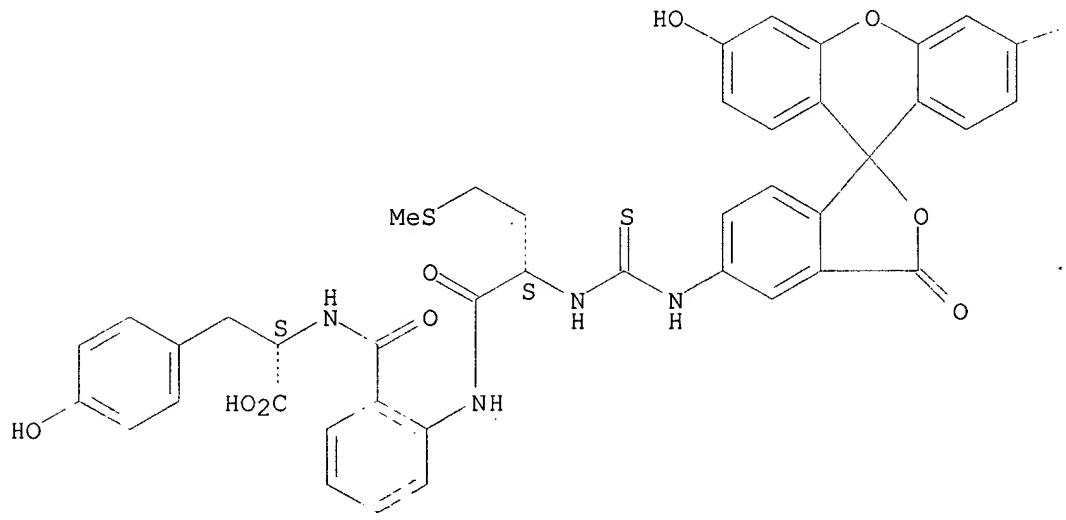
MF C42 H36 N4 O10 S2
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

PAGE 1-A



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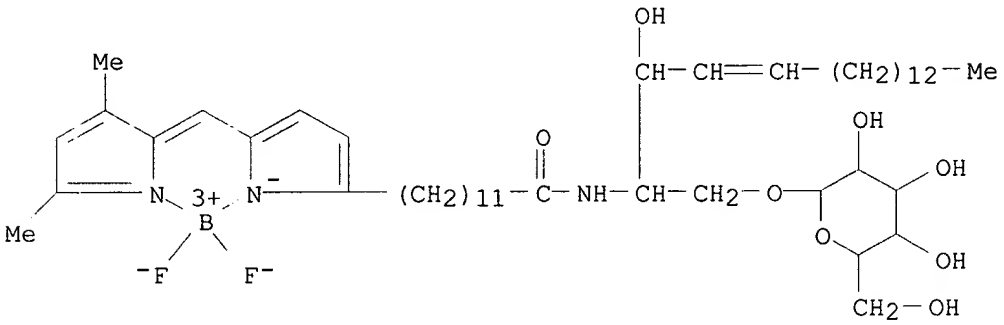
1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:56155

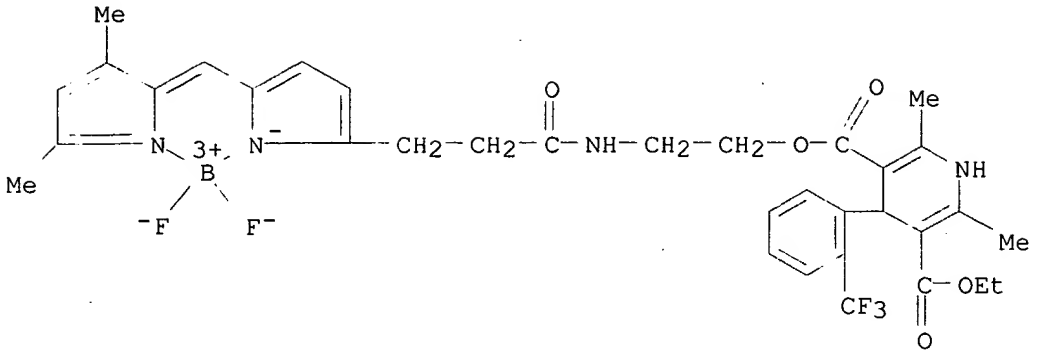
L29 ANSWER 6 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **217189-44-1** REGISTRY
CN Boron, [5-[(3,5-dimethyl-2H-pyrrol-2-ylidene-.kappa.N)methyl]-N-[(1S,2R,3E)-1-[(.beta.-D-galactopyranosyloxy)methyl]-2-hydroxy-3-heptadecenyl]-1H-pyrrole-2-dodecanamidato]difluoro-, (T-4)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN BODIPY FL C12-galactocerebroside
MF C47 H78 B F2 N3 O8
CI CCS
SR CAS Registry Services
LC STN Files: CA, CAPLUS, CHEMCATS, TOXCENTER



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:56155

L29 ANSWER 7 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **217189-43-0** REGISTRY
CN Boron, [2-[[3-[5-[(3,5-dimethyl-2H-pyrrol-2-ylidene-.kappa.N)methyl]-1H-pyrrol-2-yl-.kappa.N]-1-oxopropyl]amino]ethyl ethyl (4R)-1,4-dihydro-2,6-dimethyl-4-[2-(trifluoromethyl)phenyl]-3,5-pyridinedicarboxylato]difluoro-, (T-4)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN (-)-DM-BODIPY dihydropyridine
MF C34 H36 B F5 N4 O5
CI CCS
SR CAS Registry Services
LC STN Files: CA, CAPLUS, CHEMCATS, TOXCENTER



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:56155

L29 ANSWER 8 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **217189-42-9** REGISTRY
CN Boron, [2-[[3-[5-[(3,5-dimethyl-2H-pyrrol-2-ylidene-.kappa.N)methyl]-1H-pyrrol-2-yl-.kappa.N]-1-oxopropyl]amino]ethyl ethyl (4S)-1,4-dihydro-2,6-dimethyl-4-[2-(trifluoromethyl)phenyl]-3,5-pyridinedicarboxylato]difluoro-, (T-4)- (9CI) (CA INDEX NAME)
OTHER NAMES:
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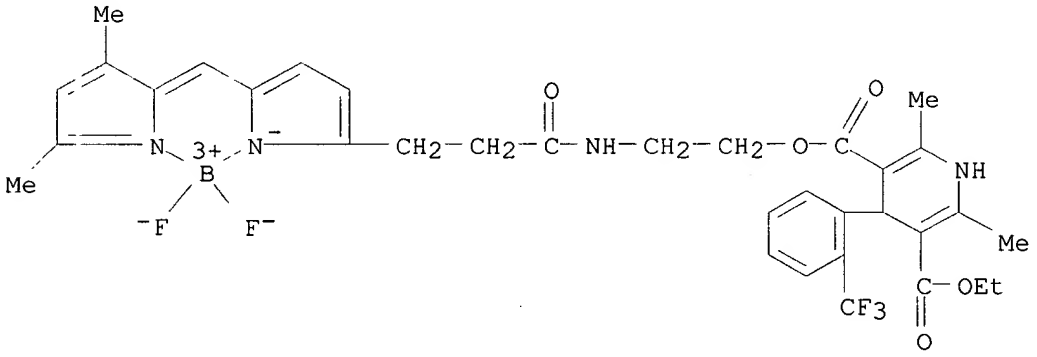
MF C34 H36 B F5 N4 O5
CI CCS
SR CAS Registry Services
LC STN Files: CA, CAPLUS, CHEMCATS, TOXCENTER



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

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L29 ANSWER 9 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **216572-00-8** REGISTRY
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oxopropyl]amino]-1-oxohexyl]oxy]dodecahydro-6,7,8a,8b,9a-pentahydroxy-3,6a,9-trimethyl-7-(1-methylethyl)-6,9-methanobenzo[1,2]pentaleno[1,6-bc]furan-8-yl 1H-pyrrole-2-carboxylato]difluoro-, (T-4)- (9CI) (CA INDEX NAME)

OTHER NAMES:
CN BODIPY FL-X ryanodine
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CI CCS
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LC STN Files: CA, CAPLUS, CHEMCATS, TOXCENTER

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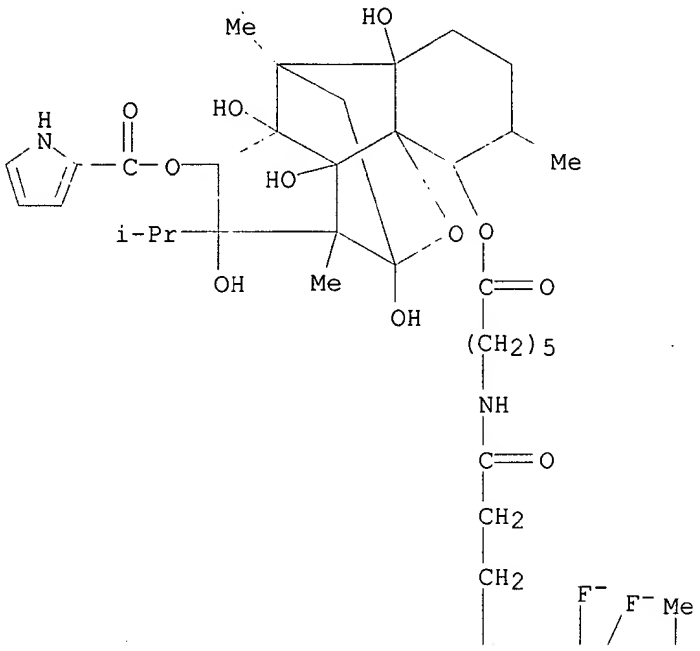

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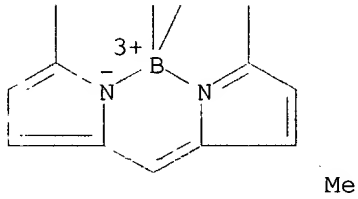

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:56155

L29 ANSWER 10 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **216571-99-2** REGISTRY

CN Boron, [(3S,3aR,4S,6S,6aR,7S,8S,9bS)-6-(acetyloxy)-2,3,3a,4,5,6,6a,7,8,9b-decahydro-3,3a-dihydroxy-3,6,9-trimethyl-8-[[(2Z)-2-methyl-1-oxo-2-butenyl]oxy]-2-oxo-7-[(1-oxooctyl)oxy]azuleno[4,5-b]furan-4-yl 5-[(3,5-dimethyl-1H-pyrrol-2-ylidene-.kappa.N)methyl]-1H-pyrrole-2-propanoato-.kappa.N1]difluoro-, (T-4)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN BODIPY FL-thapsigargin
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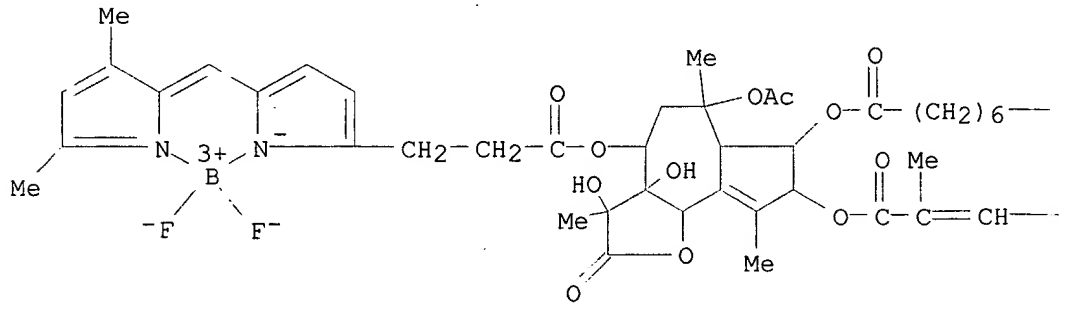
SR CAS Registry Services
LC STN Files: CA, CAPLUS, CHEMCATS, TOXCENTER

PAGE 1-A



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1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:56155

L29 ANSWER 11 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **216571-97-0** REGISTRY
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OTHER NAMES:
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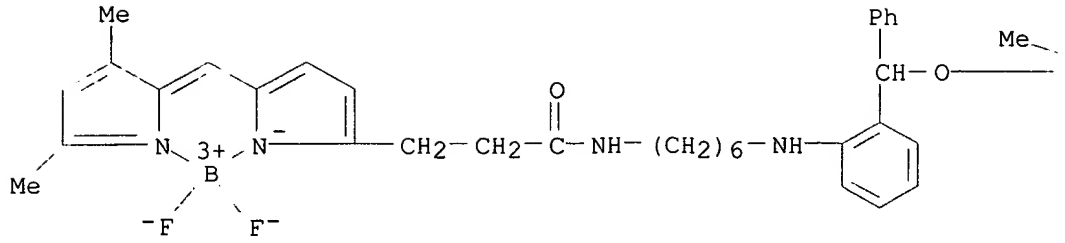
SR CAS Registry Services
LC STN Files: CA, CAPLUS, TOXCENTER

PAGE 1-A



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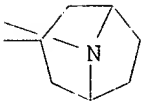

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REFERENCE 1: 131:56155

L29 ANSWER 12 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **216483-92-0** REGISTRY
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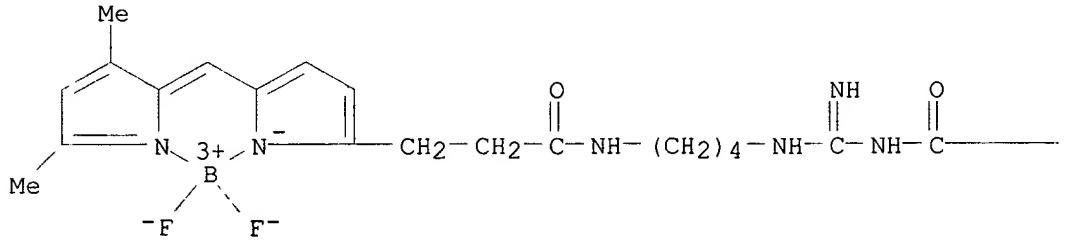
OTHER NAMES:
CN BODIPY FL-amiloride
MF C24 H30 B Cl F2 N10 O2 . Cl H
CI CCS
SR CAS Registry Services
LC STN Files: CA, CAPLUS, CHEMCATS, TOXCENTER

PAGE 1-A



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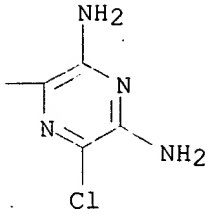

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

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L29 ANSWER 13 OF 28 REGISTRY COPYRIGHT 2002 ACS
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OTHER NAMES:
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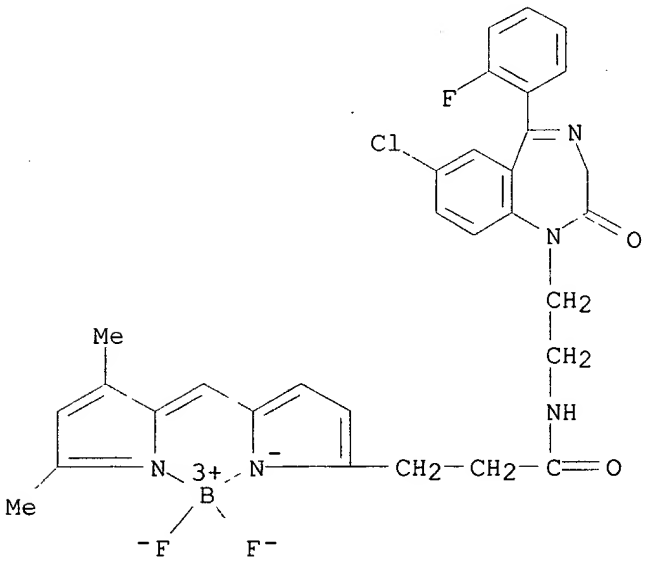
MF C31 H28 B Cl F3 N5 O2
CI CCS
SR CAS Registry Services
LC STN Files: CA, CAPLUS, TOXCENTER, TOXLIT



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3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

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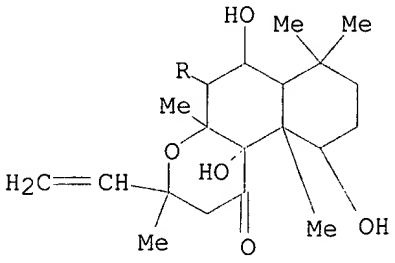
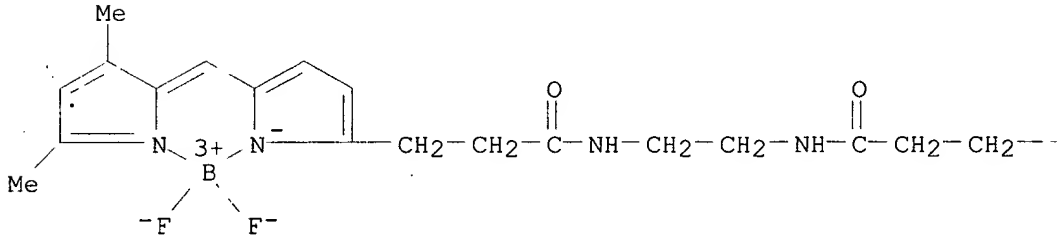
REFERENCE 2: 132:217068

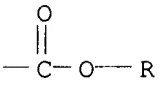
REFERENCE 3: 131:56155

L29 ANSWER 14 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **212116-60-4** REGISTRY
CN Boron, [(3R,4aR,5S,6S,6aS,10S,10aR,10bS)-3-ethenyldodecahydro-6,10,10b-trihydroxy-3,4a,7,7,7a-pentamethyl-1-oxo-1H-naphtho[2,1-b]pyran-5-yl 4-[[2-[[3-[5-[(3,5-dimethyl-2H-pyrrol-2-ylidene-.kappa.N)methyl]-1H-pyrrol-2-yl-.kappa.N]-1-oxopropyl]amino]ethyl]amino]-4-oxobutanoato]difluoro-, (T-4)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN BODIPY FL-forskolin
MF C40 H55 B F2 N4 O9
CI CCS
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

PAGE 1-A





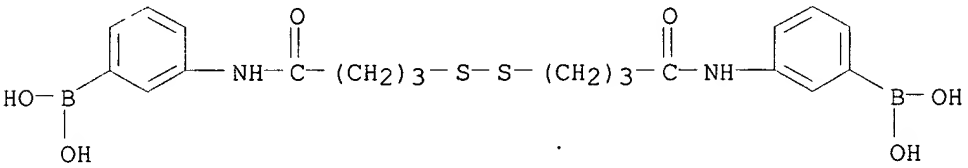


2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:56155

REFERENCE 2: 129:200896

L29 ANSWER 15 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **210907-57-6** REGISTRY
CN Boronic acid, [dithiobis[(1-oxo-4,1-butanediyl)imino-3,1-phenylene]]bis- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Bis(3-((3-boronophenyl)carbamoyl)propyl) disulfide
MF C20 H26 B2 N2 O6 S2
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER



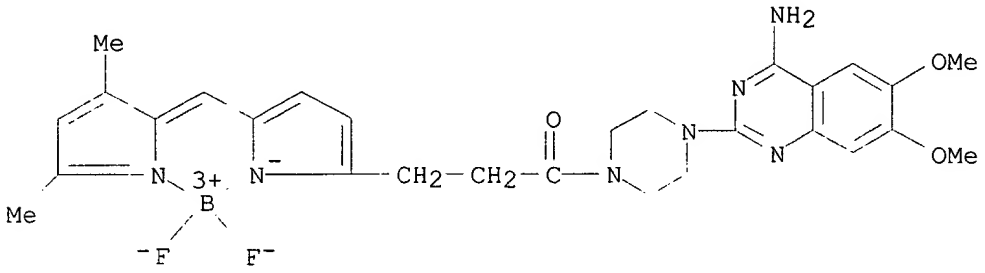
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 129:149097

L29 ANSWER 16 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **175799-93-6** REGISTRY
CN Boron, [1-(4-amino-6,7-dimethoxy-2-quinazolinyl)-4-[3-[5-[(3,5-dimethyl-2H-

pyrrol-2-ylidene-.kappa.N)methyl]-1H-pyrrol-2-yl-.kappa.N]-1-oxopropyl]piperazinato]difluoro-, (T-4)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Boron, [1-(4-amino-6,7-dimethoxy-2-quinazolinyl)-4-[3-[5-[(3,5-dimethyl-2H-pyrrol-2-ylidene)methyl]-1H-pyrrol-2-yl]-1-oxopropyl]piperazinato]difluoro-, (T-4)-
OTHER NAMES:
CN BODIPY FL prazosin
MF C28 H32 B F2 N7 O3
CI CCS
SR CA
LC STN Files: BIOSIS, CA, CAPLUS, CHEMCATS, TOXCENTER, TOXLIT



5 REFERENCES IN FILE CA (1967 TO DATE)
5 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:157934

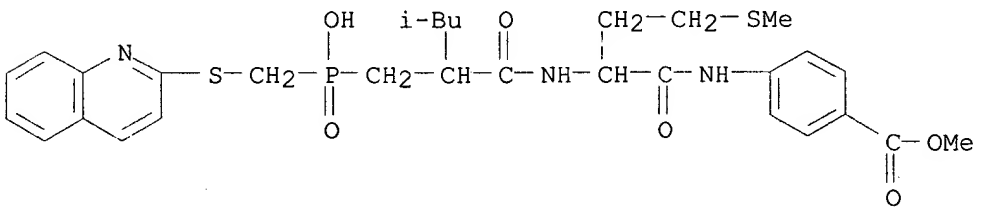
REFERENCE 2: 131:295533

REFERENCE 3: 131:56155

REFERENCE 4: 129:255117

REFERENCE 5: 124:279343

L29 ANSWER 17 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **169322-28-5** REGISTRY
CN Benzoic acid, 4-[[2-[[2-[[hydroxy[(2-quinolinylthio)methyl]phosphinyl]methyl]-4-methyl-1-oxopentyl]amino]-4-(methylthio)-1-oxobutyl]amino]-, methyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C30 H38 N3 O6 P S2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

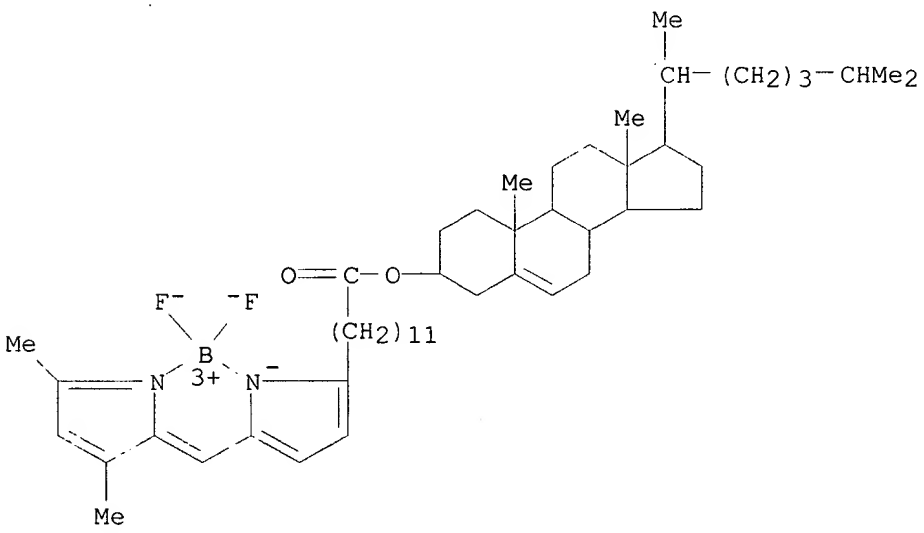
3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 132:208142

REFERENCE 2: 125:143320

REFERENCE 3: 124:24881

L29 ANSWER 18 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **151736-99-1** REGISTRY
CN Boron, [(3.beta.)-cholest-5-en-3-yl 5-[(3,5-dimethyl-2H-pyrrol-2-ylidene)methyl]-1H-pyrrole-2-dodecanoato-.kappa.N1,.kappa.N5]difluoro-, (T-4)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Boron, [(3.beta.)-cholest-5-en-3-yl 5-[(3,5-dimethyl-2H-pyrrol-2-ylidene)methyl]-1H-pyrrole-2-dodecanoato-N1,N5]difluoro-, (T-4)-
CN Cholestane, boron deriv.
OTHER NAMES:
CN Cholesteryl-BODIPY FL C12
MF C50 H77 B F2 N2 O2
CI CCS
SR CA
LC STN Files: CA, CAPLUS, CHEMCATS, MEDLINE, TOXCENTER, TOXLIT, USPATFULL



4 REFERENCES IN FILE CA (1967 TO DATE)
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 132:9620

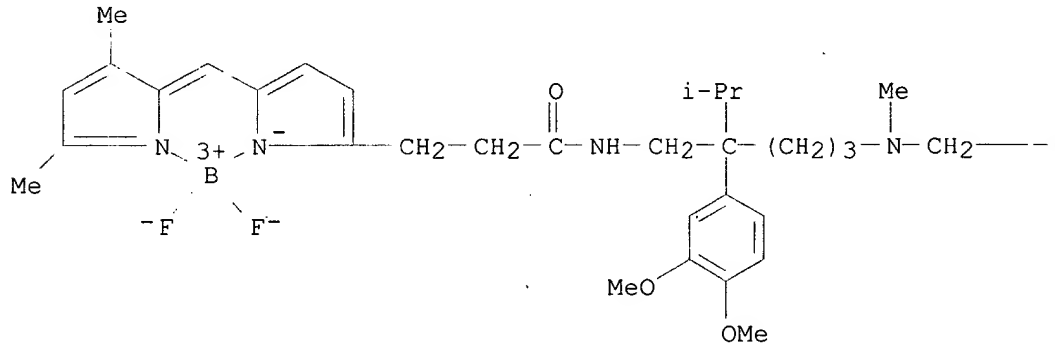
REFERENCE 2: 131:56155

REFERENCE 3: 131:56154

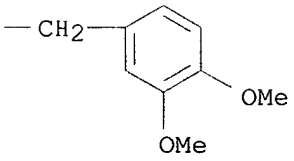
REFERENCE 4: 120:3825

L29 ANSWER 19 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **137759-83-2** REGISTRY
CN Boron, [N-[2-(3,4-dimethoxyphenyl)-5-[[2-(3,4-dimethoxyphenyl)ethyl]methylamino]-2-(1-methylethyl)pentyl]-5-[(3,5-dimethyl-2H-pyrrol-2-ylidene-.kappa.N)methyl]-1H-pyrrole-2-propanamidato-.kappa.N1]difluoro-, (T-4)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Boron, [N-[2-(3,4-dimethoxyphenyl)-5-[[2-(3,4-dimethoxyphenyl)ethyl]methylamino]-2-(1-methylethyl)pentyl]-5-[(3,5-dimethyl-2H-pyrrol-2-ylidene)methyl]-1H-pyrrole-2-propanamidato-N1,N5]difluoro-, (T-4)-
MF C41 H55 B F2 N4 O5
CI CCS, COM
SR CA
LC STN Files: CA, CANCERLIT, CAPLUS, MEDLINE, TOXCENTER, TOXLIT

PAGE 1-A



PAGE 1-B



5 REFERENCES IN FILE CA (1967 TO DATE)
5 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:56155

REFERENCE 2: 130:62541

REFERENCE 3: 123:152658

REFERENCE 4: 123:132363

REFERENCE 5: 116:309

L29 ANSWER 20 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **135243-34-4** REGISTRY
CN Boron, [5-[(3,5-dimethyl-2H-pyrrol-2-ylidene-.kappa.N)methyl]-N-[4-[2-[propyl(1,2,3,4-tetrahydro-5-hydroxy-2-naphthalenyl)amino]ethyl]phenyl]-1H-pyrrole-2-propanamidato-.kappa.N1]difluoro-, (T-4)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1H-Pyrrole-2-propanamide, 5-[(3,5-dimethyl-2H-pyrrol-2-ylidene)methyl]-N-[4-[2-[propyl(1,2,3,4-tetrahydro-5-hydroxy-2-naphthalenyl)amino]ethyl]phenyl]-, boron complex
CN Boron, [5-[(3,5-dimethyl-2H-pyrrol-2-ylidene)methyl]-N-[4-[2-[propyl(1,2,3,4-tetrahydro-5-hydroxy-2-naphthalenyl)amino]ethyl]phenyl]-1H-pyrrole-2-propanamidato-N1,N5]difluoro-, (T-4)-
OTHER NAMES:
CN BODIPY FL PPHT
MF C35 H41 B F2 N4 O2
CI CCS
SR CA
LC STN Files: CA, CAPLUS, CHEMCATS, TOXCENTER

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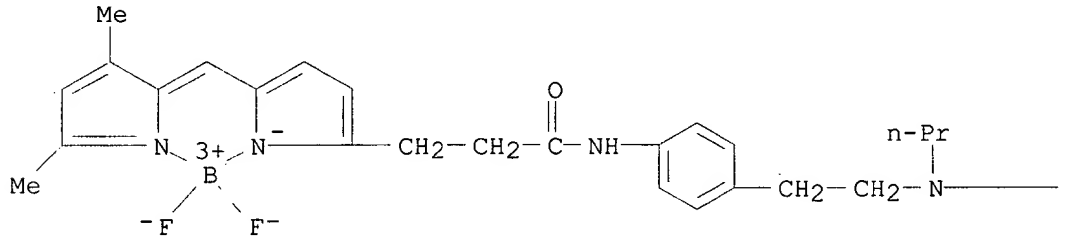
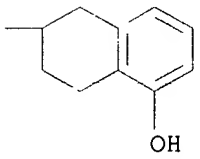


PAGE 1-B



3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

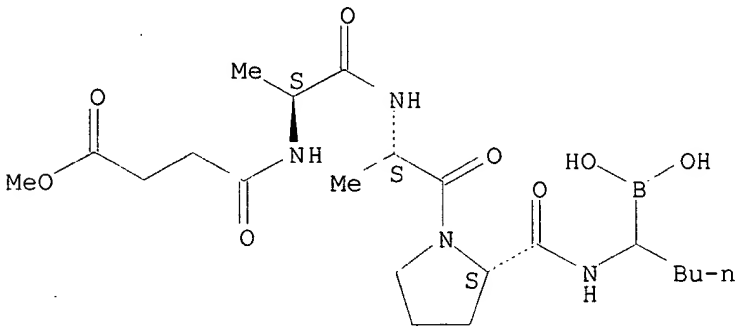
REFERENCE 1: 131:56155

REFERENCE 2: 115:109751

REFERENCE 3: 115:109750

L29 ANSWER 21 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **122722-99-0** REGISTRY
CN L-Prolinamide, N-(4-methoxy-1,4-dioxobutyl)-L-alanyl-L-alanyl-N-(1-boronopentyl)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C21 H37 B N4 O8
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

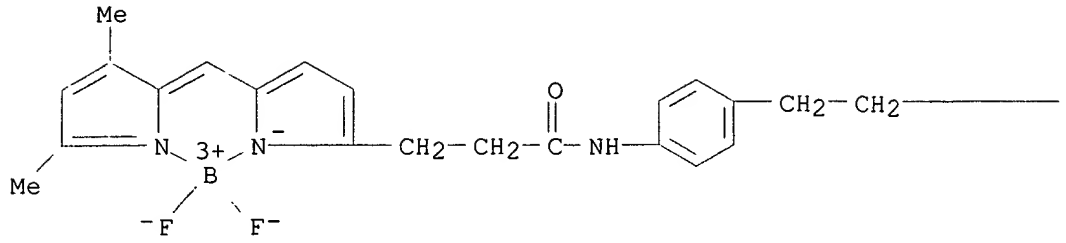
REFERENCE 1: 115:201828

REFERENCE 2: 111:149336

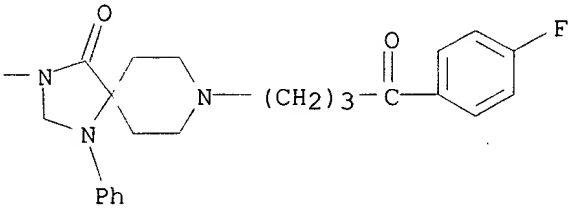
L29 ANSWER 22 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **121086-10-0** REGISTRY
CN Boron, [5-[(3,5-dimethyl-2H-pyrrol-2-ylidene-.kappa.N)methyl]-N-[4-[2-[8-[4-(4-fluorophenyl)-4-oxobutyl]-4-oxo-1-phenyl-1,3,8-triazaspiro[4.5]dec-3-yl]ethyl]phenyl]-1H-pyrrole-2-propanamidato-.kappa.N1]difluoro-, (T-4)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,3,8-Triazaspiro[4.5]decane, 1H-pyrrole-2-propanamide deriv., boron complex
CN 1,3,8-Triazaspiro[4.5]decane, boron deriv.
CN 1H-Pyrrole-2-propanamide, 5-[(3,5-dimethyl-2H-pyrrol-2-ylidene)methyl]-N-[4-[2-[8-[4-(4-fluorophenyl)-4-oxobutyl]-4-oxo-1-phenyl-1,3,8-triazaspiro[4.5]dec-3-yl]ethyl]phenyl]-, boron complex
CN Boron, [5-[(3,5-dimethyl-2H-pyrrol-2-ylidene)methyl]-N-[4-[2-[8-[4-(4-fluorophenyl)-4-oxobutyl]-4-oxo-1-phenyl-1,3,8-triazaspiro[4.5]dec-3-yl]ethyl]phenyl]-1H-pyrrole-2-propanamidato-N1,N5]difluoro-, (T-4)-
OTHER NAMES:
CN BODIPY FL-NAPS
MF C45 H48 B F3 N6 O3
CI CCS

SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

PAGE 1-A



PAGE 1-B



4 REFERENCES IN FILE CA (1967 TO DATE)
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:56155

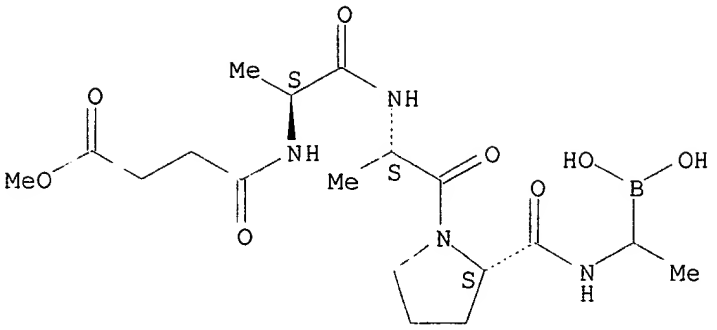
REFERENCE 2: 115:109751

REFERENCE 3: 115:109750

REFERENCE 4: 111:3539

L29 ANSWER 23 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **97590-11-9** REGISTRY
CN L-Prolinamide, N-(4-methoxy-1,4-dioxobutyl)-L-alanyl-L-alanyl-N-(1-boronoethyl)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C18 H31 B N4 O8
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

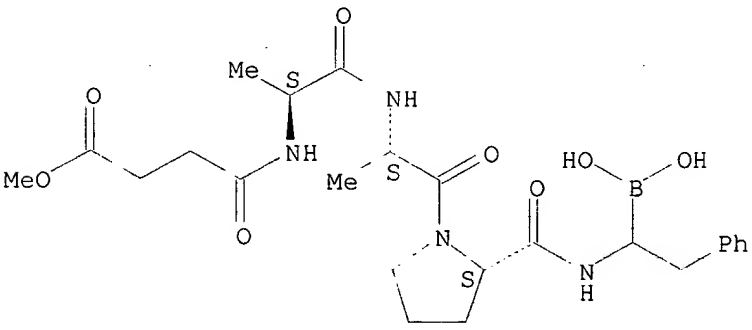
REFERENCE 1: 115:201828

REFERENCE 2: 111:149336

REFERENCE 3: 103:71709

L29 ANSWER 24 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **97590-10-8** REGISTRY
CN L-Prolinamide, N-(4-methoxy-1,4-dioxobutyl)-L-alanyl-L-alanyl-N-(1-borono-2-phenylethyl)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C24 H35 B N4 O8
SR CA
LC STN Files: CA, CAPLUS, MEDLINE, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

6 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
6 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 123:137188

REFERENCE 2: 119:265183

REFERENCE 3: 115:201828

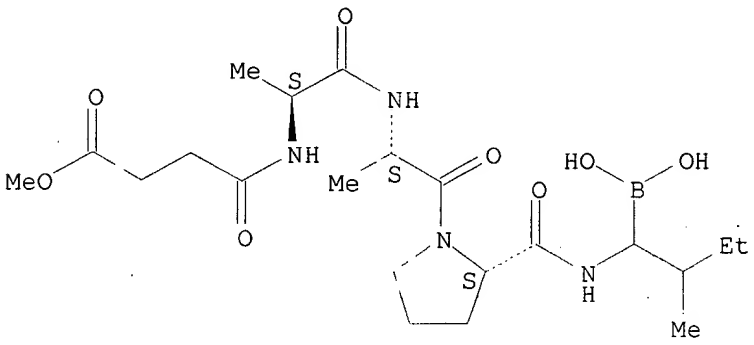
REFERENCE 4: 112:3307

REFERENCE 5: 111:149336

REFERENCE 6: 103:71709

L29 ANSWER 25 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **97532-27-9** REGISTRY
CN L-Prolinamide, N-(4-methoxy-1,4-dioxobutyl)-L-alanyl-L-alanyl-N-(1-borono-2-methylbutyl)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C21 H37 B N4 O8
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

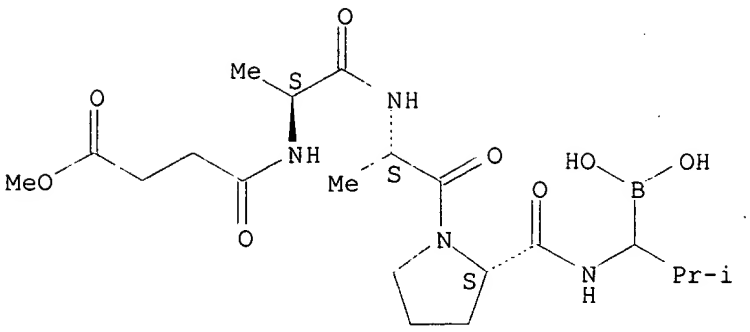
2 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 111:149336

REFERENCE 2: 103:71709

L29 ANSWER 26 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **94293-78-4** REGISTRY
CN L-Prolinamide, N-(4-methoxy-1,4-dioxobutyl)-L-alanyl-L-alanyl-N-(1-borono-2-methylpropyl)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C20 H35 B N4 O8
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
8 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 123:144640

REFERENCE 2: 119:265183

REFERENCE 3: 115:201828

REFERENCE 4: 112:231733

REFERENCE 5: 111:149336

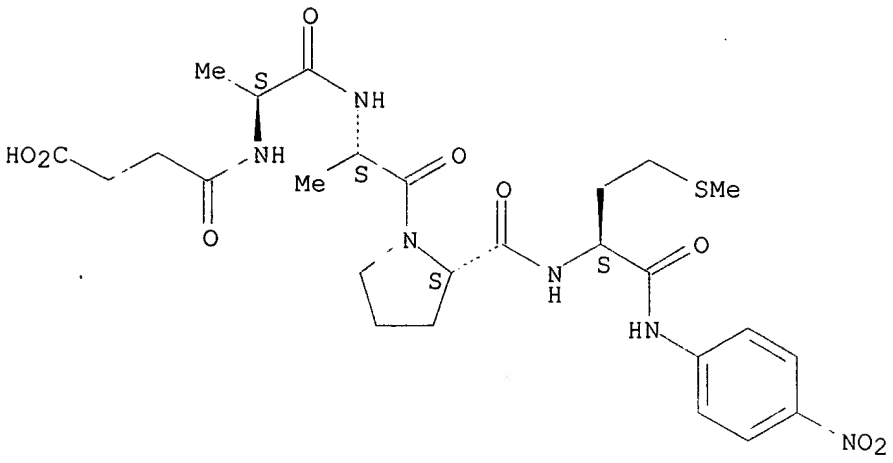
REFERENCE 6: 109:145119

REFERENCE 7: 103:71709

REFERENCE 8: 102:58256

L29 ANSWER 27 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **72682-73-6** REGISTRY
CN L-Methioninamide, N-(3-carboxy-1-oxopropyl)-L-alanyl-L-alanyl-L-prolyl-N-(4-nitrophenyl)- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
DR 71034-58-7
MF C26 H36 N6 O9 S
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



17 REFERENCES IN FILE CA (1967 TO DATE)
17 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:350344

REFERENCE 2: 134:349832

REFERENCE 3: 133:2006

REFERENCE 4: 130:34916

REFERENCE 5: 129:227371

REFERENCE 6: 128:150986

REFERENCE 7: 125:321588

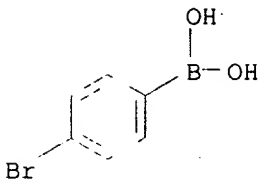
REFERENCE 8: 119:176474

REFERENCE 9: 112:174711

REFERENCE 10: 111:149336

L29 ANSWER 28 OF 28 REGISTRY COPYRIGHT 2002 ACS
RN **5467-74-3** REGISTRY
CN Boronic acid, (4-bromophenyl)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzeneboronic acid, p-bromo- (6CI, 7CI, 8CI)
OTHER NAMES:
CN (4-Bromophenyl)boronic acid
CN (p-Bromophenyl)boronic acid
CN 4-Bromobenzeneboronic acid
CN 4-Bromophenylboric acid
CN p-Bromobenzeneboronic acid
CN p-Bromophenylboric acid
MF C6 H6 B Br O2
CI COM
LC STN Files: BEILSTEIN*, BIOSIS, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, MEDLINE, RTECS*, SPECINFO, TOXCENTER, TOXLIT, USPATFULL

(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

175 REFERENCES IN FILE CA (1967 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
176 REFERENCES IN FILE CAPLUS (1967 TO DATE)
11 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 136:7869

REFERENCE 2: 135:344573

REFERENCE 3: 135:272755

REFERENCE 4: 135:257270

REFERENCE 5: 135:210810

REFERENCE 6: 135:195157

REFERENCE 7: 135:177043

REFERENCE 8: 135:152366

REFERENCE 9: 135:137452

REFERENCE 10: 135:122368

=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 20:41:53 ON 01 MAR 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1907 - 1 Mar 2002 VOL 136 ISS 10
FILE LAST UPDATED: 28 Feb 2002 (20020228/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the CAS files between 12/27/01 and 1/23/02. As of 1/23/02, the situation has been resolved. Searches and/or SDIs in the H/Z/CA/CAplus files incorporating CAS Registry Numbers with the P indicator executed between 12/27/01 and 1/23/02 may be incomplete. See the NEWS message on this topic for more information.

=>

=>

=> d stat que l37 nos
L14 STR
L15 1335 SEA FILE=REGISTRY SSS FUL L14
L16 STR
L17 3 SEA FILE=REGISTRY SUB=L15 SSS FUL L16
L18 1 SEA FILE=REGISTRY ABB=ON PLU=ON BORON/CN
L19 79415 SEA FILE=REGISTRY ABB=ON PLU=ON BORON/BI
L20 660 SEA FILE=HCAPLUS ABB=ON PLU=ON L15
L21 SEL PLU=ON L18 1- CHEM : 8 TERMS
L22 179566 SEA FILE=HCAPLUS ABB=ON PLU=ON L21
L23 256538 SEA FILE=HCAPLUS ABB=ON PLU=ON L22 OR L19
L24 11 SEA FILE=HCAPLUS ABB=ON PLU=ON L23 AND L20
L25 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L24 AND (?INHIBIT? OR ?TUMOR? OR TUMOUR? OR ?CANCER? OR ?NEOPLAS? OR ?MALIGN?)
L26 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L17
L27 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L26 AND (?INHIBIT? OR ?TUMOR? OR TUMOUR? OR ?CANCER? OR ?NEOPLAS? OR ?MALIGN?)
L28 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L25 NOT L27
L32 2 SEA FILE=REGISTRY ABB=ON PLU=ON GROWTH(L)TUMOR(L)CELL?
L33 SEL PLU=ON L32 1- CHEM : 6 TERMS
L34 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L33
L35 41672 SEA FILE=HCAPLUS ABB=ON PLU=ON L34 OR GROWTH(L)TUMOR(L)CELL?

L36 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L35 AND L20
L37 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L36 NOT (L27 OR L28)

=>
=>

=> d ibib abs hitrn l37 1

L37 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1979:114924 HCAPLUS
DOCUMENT NUMBER: 90:114924
TITLE: Opposite effects of dextrans substituted with

sulfhydryls or mercury on tumor growth
AUTHOR(S): Pitha, Josef; Kociolek, Karol; Apffel, Charles A.
CORPORATE SOURCE: Natl. Inst. Aging, NIH, Baltimore, Md., USA
SOURCE: Cancer Res. (1979), 39(1), 170-3
CODEN: CNREA8; ISSN: 0008-5472
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Macromol. dextrans carrying substituents terminated by SH groups or arom. amines inhibited the **growth** of a fibrosarcoma and of a mammary adenocarcinoma in a syngeneic mouse model. These compds. had no or very low toxicity to animals and were nontoxic to fibrosarcoma **cells** in vitro. Small-mol.-wt. compds. carrying the same substituents as the above dextrans were without any effect on the **growth** of these **tumors**. A dextran substituted with Hg-contg. side chains was **growth** promoting for the same fibrosarcoma in mice at doses which were nontoxic for these animals. However, the Hg-contg. compd. was toxic to fibrosarcoma **cells** in vitro. Apparently, these nonpermeating macromols. do not directly influence the **tumor cells** in animals but modulate the natural system of defense against **tumors; cells** of that system were stimulated or poisoned by the substituted dextrans.
IT **69537-86-6D**, reaction products with oxidized dextran
69537-87-7D, reaction products with oxidized dextran
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(neoplasm inhibition by)

=> select hit rn l37 1
E29 THROUGH E30 ASSIGNED

=> fil reg
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DICTIONARY FILE UPDATES: 28 FEB 2002 HIGHEST RN 397241-73-5

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Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the H/Z/CA/CAplus files between 12/27/01 and 1/23/02. Use of the P indicator in online and SDI searches during this period, either directly appended to a CAS Registry Number or by qualifying an L-number with /P, may have yielded incomplete results. As of 1/23/02, the situation has been resolved. Also, note that searches conducted using the PREP role indicator were not affected.

Customers running searches and/or SDIs in the H/Z/CA/CAplus files incorporating CAS Registry Numbers with the P indicator between 12/27/01 and 1/23/02, are encouraged to re-run these strategies. Contact the CAS Help Desk at 1-800-848-6533 in North America or 1-614-447-3698, worldwide, or send an e-mail to help@cas.org for further assistance or to receive a credit for any duplicate searches.

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=> s e29-e30
             1 69537-86-6/BI
               (69537-86-6/RN)
             1 69537-87-7/BI
               (69537-87-7/RN)
L38          2 (69537-86-6/BI OR 69537-87-7/BI)

=> d ide can 138 1-2

L38  ANSWER 1 OF 2  REGISTRY  COPYRIGHT 2002 ACS
RN   69537-87-7  REGISTRY
CN   Benzoic acid, 4-[[2-(acetylamino)-4-mercapto-1-oxobutyl]amino]- (9CI)  (CA
     INDEX NAME)
FS   3D CONCORD
MF   C13 H16 N2 O4 S
LC   STN Files:   CA, CAPLUS, TOXCENTER, TOXLIT
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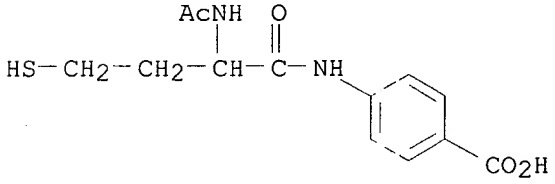


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**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

               1 REFERENCES IN FILE CA (1967 TO DATE)
               1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
               1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE   1:  90:114924

L38  ANSWER 2 OF 2  REGISTRY  COPYRIGHT 2002 ACS
RN   69537-86-6  REGISTRY
CN   Butanamide, 2-(acetylamino)-N-[4-[(4-aminophenyl)methyl]phenyl]-4-mercapto-
      (9CI)  (CA INDEX NAME)
FS   3D CONCORD
MF   C19 H23 N3 O2 S
LC   STN Files:   CA, CAPLUS, TOXCENTER, TOXLIT
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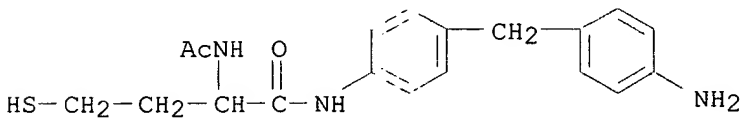

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 90:114924

L11 ANSWER 1 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:416988 CAPLUS
DOCUMENT NUMBER: 139:141995
TITLE: Oligoanilines: From crystals to FET
AUTHOR(S): Quillard, S.; Corraze, B.; Poncet, M.; Mevellec, J.-Y.; Buisson, J.-P.; Evain, M.; Wang, W.; MacDiarmid, A. G.
CORPORATE SOURCE: L.P.C., Institut des Materiaux de Nantes, Nantes, 44072/03, Fr.
SOURCE: Synthetic Metals (2003), 137(1-3), 921-922
CODEN: SYMEDZ; ISSN: 0379-6779
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Recently, the FET technique led to doped materials without structural defects. Wishing to apply this to **oligoanilines** (dimer and tetramer), the authors detd. the crystal **structures** and investigated the polarizability tensors via polarized Raman scattering. X-ray diffraction and polarized IR revealed that evapd. thin films are layered textured, in relation to cryst. parameters. Thin film processing combined with the phys. properties of these oligomers is then a convenient way to realize electronic devices, such as OFET and sensor systems.

L11 ANSWER 2 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:834191 CAPLUS
DOCUMENT NUMBER: 138:90210
TITLE: Intramolecular electron-transfer of C60-oligoaniline leucoemeraldine conjugates upon photoactivation
AUTHOR(S): Canteenwala, Taizoon; Anantharaj, Vijayaraj; Patil, Sambhaji V.; Halder, Manas; Chiang, Long Y.
CORPORATE SOURCE: Center for Condensed Matter Sciences, National Taiwan University, Taipei, Taiwan
SOURCE: Journal of Macromolecular Science, Pure and Applied Chemistry (2002), A39(10), 1069-1083
CODEN: JSPCE6; ISSN: 1060-1325
PUBLISHER: Marcel Dekker, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Conductive starburst C60-derived macromols. were synthesized using C60(NO2)6 as a precursor intermediate for linking .pi.-conjugate oligomers, such as tetraaniline and hexadecaaniline, directly onto the fullerene cage. Subsequent phenylhydrazine redn. of the resulting hexa(tetraanilino)[60]fullerene and hexa(hexadecaanilino)[60]fullerene emeraldines produced the corresponding leucoemeraldine donors. Photoexcitation of these hexa(oligoanilino)[60]fullerene leucoemeraldines under N2 induced intramol. electron-transfer from benzenoid moieties of **oligoaniline** arms to the C60 cage, that regenerated the emeraldine **structure** in **oligoaniline** arms. Proceeding on the no. of electrons transferred was followed and estd. by in situ chem. trapping method on the reaction of electrophiles with fullerenic anions generated. That substantiated the capability of the fullerene cage to accept multiple electrons during the irradn. process.

L11 ANSWER 3 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:711384 CAPLUS
DOCUMENT NUMBER: 137:232459
TITLE: Preparation of multioligoanilinated fullerenes as photodynamic therapeutic agents to inhibit tumor

growth
INVENTOR(S): Chiang, Long Y.
PATENT ASSIGNEE(S): Taiwan
SOURCE: U.S., 8 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6452037	B1	20020917	US 2001-840323	20010423
EP 1253139	A2	20021030	EP 2002-9029	20020423
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003012624	A2	20030115	JP 2002-120491	20020423

PRIORITY APPLN. INFO.: US 2001-840323 A 20010423
OTHER SOURCE(S): MARPAT 137:232459
REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Multioligoanilinated fullerenes (MOAFs) of the **formula** SpF1[C[CO[GF2(Tq)]b(AaK)c]n]m [I; wherein p and q = independently 0-20; a = 1-8; b = 0-1; c = 1-20; provided that when b = 0, then c = 1; n = 1-2; m = 1-20; F1 and F2 = independently a C60-66 or C70 fullerene; S and T = independently OH, NH2, NHR, or SH; R = alkyl; A = independently N-(un)substituted **oligoaniline** of 2-12 aniline units; K = independently H, (NX-C6H4)1-3NH2, (NX-C6H4)1-3NHCS2H, (NX-C6H4)1-3N:CHArSH, or (NX-C6H4)1-3NHCOArSH; X = H, Z, CH2CO2H, CH2CO2Z, CH2COSZ, CH2CONH2, CH2CONHZ; Ar = aryl; Z = ED; E = R, RAr, ArR, or Ar; D = OH, SH, NH2, NHOH, SO3H, OSO3H, CO2H, CONH2, CHNH2CO2H, PO3H2, OPO3H2, glycoside, CH2OH, etc; G = independently OB, RO, NHBRNH, OBRNH, NHBRO, OBRS, or NHBRS; B = independently alkyl, aryl, (poly)ether, (poly)ester, amide, etc.] were prepd. and tested for use as anti-tumor agents. For example, fullerene deca(hexadecaaniline) adduct in DMF was treated sequentially with either DBU and 1,4-butane sultone or with NaH and 1,4-butane sultone to give the sulfobutylated deca(hexadecaaanilino) adduct of fullerene (F10A16S). The latter exhibited maximal photodynamic cytotoxicity efficacy of > 90% at a concn. of 5.0-10.0 .mu.M and an irradn. time of 60 min against fibrosarcoma CCRC 60037 and sarcoma 180 cells. In the absence of light irradn., no cytotoxicity was obsd. even at the highest F10A16S concn., i.e. 10 .mu.M. In a photodynamic therapy study, the fibrosarcoma tumor wt. in male ICR mice was reduced nearly 99% after i.p. injection of F10A16S at a concn. of 10 mg/kg followed by laser irradn. at 633 nm. Also disclosed are pharmaceutical compns. contg. a pharmaceutically effective amt. of I.

L11 ANSWER 4 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:496896 CAPLUS
DOCUMENT NUMBER: 137:286754
TITLE: A comparative study of intermolecular interactions in the crystal **structures** of phenyl/phenyl end-capped **oligoanilines**
AUTHOR(S): Gawlicka-Chruszcz, Anna; Stadnicka, Katarzyna
CORPORATE SOURCE: Faculty of Chemistry, Jagiellonian University, Krakow, 30-060, Pol.
SOURCE: Acta Crystallographica, Section C: Crystal Structure Communications (2002), C58(7), o416-o420
CODEN: ACSCEE; ISSN: 0108-2701
PUBLISHER: Blackwell Munksgaard
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

TI A comparative study of intermolecular interactions in the crystal **structures** of phenyl/phenyl end-capped **oligoanilines**

L11 ANSWER 5 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:389619 CAPLUS
DOCUMENT NUMBER: 137:125476
TITLE: Synthesis and characterization of oligosalicylaldehyde-graft-oligoaniline and its beginning oligomers
AUTHOR(S): Kaya, Ismet; Vilayetoglu, Adalet R.
CORPORATE SOURCE: Faculty of Sciences and Arts, Department of Chemistry, Canakkale Onsekiz Mart University, Canakkale, 17100, Turk.
SOURCE: Journal of Applied Polymer Science (2002), 85(1), 218-226
CODEN: JAPNAB; ISSN: 0021-8995
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Conjuge bonding oligosalicylaldehyde-graft-**oligoaniline** (OSA-graft-OA) was synthesized from the polycondensation reaction of oligosalicylaldehyde (OSA) with **oligoaniline** (OA). There were various functional groups such as OH, NH and CH=N in the **structure** of the graft cooligomer. The phys. properties of the graft cooligomers such as melting temp. and soly. were studied. The no.-av. mol. wt., mass-av. mol. wt., and polydispersity index of OA, OSA, and fractions of the graft cooligomers [(OSA-graft-OA)-I] and [(OSA-graft-OA)-II] were found to be 740, 780 g mol-1, 1.05; 3700, 5990 g mol-1, 1.62; 990, 2770 g mol-1, 2.80; and 1300, 4100 g mol-1, 3.15, resp. The FTIR and UV-visible spectra of the graft cooligomer were compared with those of the initial oligomers. Based on the spectral analyses, the OSA-graft-OA synthesized from the polycondensation reaction of arom. amine with aldehyde has a long oligophenol macromol. bonded through an azomethine bridge to oligophenylamine side chains. The thermal stability of the graft cooligomer and oligomers were measured by thermogravimetric anal. (TG) under an air atm. The carbonaceous residues of the [((OSA-graft-OA)-I) (sol. in ethanol) and ((OSA-graft-OA)-II) (sol. in toluene)] were 23% and 40%, resp., at 1000.degree..

L11 ANSWER 6 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:5942 CAPLUS
DOCUMENT NUMBER: 136:199971
TITLE: Facile Synthesis, Crystal Structures, and High-Spin Cationic States of All-para-Brominated Oligo(N-phenyl-m-aniline)s
AUTHOR(S): Ito, Akihiro; Ino, Haruhiro; Tanaka, Kazuyoshi; Kanemoto, Katsuichi; Kato, Tatsuhisa
CORPORATE SOURCE: Department of Molecular Engineering Graduate School of Engineering, Kyoto University, Sakyo-ku, Kyoto, 606-8501, Japan
SOURCE: Journal of Organic Chemistry (2002), 67(2), 491-498
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Syntheses of brominated **oligoanilines** I and II were achieved in a one-pot procedure from the parent nonbrominated oligomers and benzyltrimethylammonium tribromide [(BTMA)Br3]. An X-ray crystallog. anal. revealed that II has a U-shaped **structure**, suggesting that

the analogous polymer easily adopts helical **structures**. Furthermore, the redox properties were investigated by the UV-vis and EPR measurements. It was confirmed that the both I and II can be oxidized into the dications I2+ and II2+ with triplet spin-multiplicity.

L11 ANSWER 7 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:641898 CAPLUS
TITLE: Synthesis of starburst hexadecaaniline derivative of C60 and its elastic submicroparticles
AUTHOR(S): Chiang, Long Y.
CORPORATE SOURCE: Center for Condensed Matter Sciences, National Taiwan University, Taipei, 10764, Taiwan
SOURCE: Abstracts of Papers, 222nd ACS National Meeting, Chicago, IL, United States, August 26-30, 2001 (2001), POLY-028. American Chemical Society: Washington, D. C.
CODEN: 69BUZP
DOCUMENT TYPE: Conference; Meeting Abstract
LANGUAGE: English
AB Efficient synthesis of starburst **oligoanilines** was demonstrated using hexamalonate and pentamalonate [60]fullerene adducts as precursor mols. where C60 serves as a mol. core. Electron-donating properties of **oligoanilines** were enhanced by phenylhydrazine redn. leading to the corresponding leucoemeraldine derivs. Intramol. electron-transfer from hexadecaaniline arms of these starburst mols. to the C60 core was found to be highly efficient upon irradn. Under in situ chem. trapping of fullerenic anions in the soln. of leucoemeraldine deca(hexadecaanilinated)fullerene malonate deriv., multiple electrons consecutively transferred from several **oligoaniline** arms to the fullerene cage were detected. The other method utilizes the starburst polyaniline **structure** derived from the fullerene cage bound on the elastic polysiloxane core submicroparticle. The synthetic approach becomes possible upon availability of facile starburst hexanilino, hexa(dianilino), hexa(tetraanilino), and hexa(hexadecaanilino)[60]fulleren es syntheses using hexanitro[60]fullerene (HNF) as a reactive precursor mol. Utilization of this reactivity towards electron-donor nucleophiles, a synthetic approach was developed for producing oligoanilinated fullerenes as intramol. donor-acceptor A-(D)6 analogous starburst macromols. with a well-defined arm no. and chain length. Connection of **oligoaniline** donor-fullerene acceptor A-(D)6 starburst macromols. onto polysiloxane core particle forms a dendritic core-shell conductive elastomers.

L11 ANSWER 8 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:475286 CAPLUS
DOCUMENT NUMBER: 135:211547
TITLE: Intermolecular Electron Transfer in Low-Molecular-Weight Polyaniline Models Associating on Protonation by Amphiphilic Acid in Organic Solvent
AUTHOR(S): Lokshin, Natalya A.; Pyshkina, Olga A.; Golubev, Vladimir B.; Sergeyev, Vladimir G.; Zezin, Alexander B.; Kabanov, Victor A.; Levon, Kalle; Piankijsakul, Somkiat
CORPORATE SOURCE: Polymer Department Division of Chemistry, Moscow State University, Moscow, 119899, Russia
SOURCE: Macromolecules (2001), 34(16), 5480-5486
CODEN: MAMOBX; ISSN: 0024-9297
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
AB Protonation of N-(4-aminophenyl)-N-{4-[(4-aminophenyl)imino]-2,5-

cyclohexadien-1-ylidene}-1,4-benzenediamine and N-[4-(dimethylamino)phenyl]-N-(4-{[4-(dimethylamino)phenyl]imino}-2,5-cyclohexadien-1-ylidene)amine as trianiline models of polyaniline emeraldine base (PANI-EB) with dodecylbenzenesulfonic acid (DBSAH), a typical organo-sol. acidic dopant, in chloroform and 1-methyl-2-pyrrolidinone solns., and also interaction of the resulting products with distearyldimethylammonium chloride (DDAC) as a potential de-doping agent were studied at ambient temp. by UV-vis and ESR spectroscopic methods. It has been shown that protonation is followed by intermol. proton-electron transfer and results in the formation of mono-radical cations apparently paired with the counterions which tend to assoc. even in rather dil. chloroform solns. and form aggregates characterized by intermol. electron interchange. These aggregates, however, dissoc. on adding an excess of the protonating agent, revealing an ESR signal line with resolved hyperfine **structure** which corresponds to a mono-radical with unpaired electron interacting with two N nuclei. The proposed reaction mechanism probably can be applied to doping higher **oligoanilines** and PANI-EB. It is also shown that the protonated trimer complexes can be deprotonated ("de-doped") in chloroform soln. on adding DDAC. This is in contrast to PANI-EB doped with DBSAH, which could not be deprotonated with cationic amphiphiles.

L11 ANSWER 9 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:355902 CAPLUS
DOCUMENT NUMBER: 135:107846
TITLE: NMR and UV-Vis study on phenyl-capped oligoaniline salts
AUTHOR(S): Sun, Z. C.; Jing, X. B.; Wang, X. H.; Li, J.; Wang, F. S.
CORPORATE SOURCE: State Key Lab of Polymer Physics and Chemistry, CAS, Changchun Institute of Applied Chemistry, Changchun, 130022, Peop. Rep. China
SOURCE: Synthetic Metals (2001), 119(1-3), 313-314
CODEN: SYMEDZ; ISSN: 0379-6779
PUBLISHER: Elsevier Science S.A.
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Phenyl-capped **oligoanilines** in the oxidized state and their salts (by camphor sulfonic acid, CSA) were comparatively studied by UV-Vis and NMR spectroscopy. The UV-Vis spectra revealed a similar electron transfer behavior and similar **structure** in the tetra-aniline to those in polyaniline. Upon formation of the salt, 1H NMR CH peaks of the oligomers showed large shifts to lower fields. The longer the mol. of a oligomer is, the more the shift, indicating that the charge brought into the N atoms by the proton was redistributed over the whole mol. The CH and quaternary carbon peak-shifts support the electron cloud motion route H.fwdarw.C.fwdarw.C.fwdarw.N.fwdarw.H. This is in agreement with the four ring BQ derivs. model.

L11 ANSWER 10 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:27821 CAPLUS
DOCUMENT NUMBER: 134:237930
TITLE: Regiospecific Copolyanilines from Substituted Oligoanilines: Electrochemical Comparisons with Random Copolyanilines
AUTHOR(S): Pullen, Anthony E.; Swager, Timothy M.
CORPORATE SOURCE: Department of Chemistry, Massachusetts Institute of Technology, Cambridge, MA, 02139, USA
SOURCE: Macromolecules (2001), 34(4), 812-816
CODEN: MAMOBX; ISSN: 0024-9297
PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Regiospecific substituted polyanilines were prepd. via electropolymn. of methoxy-substituted dimeric and trimeric **oligoanilines**. The **oligoaniline** monomers were synthesized utilizing Pd-catalyzed aryl amination cross-coupling chem. The single-crystal x-ray **structure** of one of the oligomers is presented. The **oligoaniline** monomers were electropolymd. in 1 M H2SO4, and the electrochem. behavior and potential-dependent in situ cond. of the regiospecific polyaniline films was compared to that of random copolymers obtained from solns. of aniline and o-anisidine of the same molar ratio. The regiospecific polyanilines exhibited higher cond., which may be attributed to a more cryst. and regular **structure**. Differences in the oxidn. potential of the polymers are obsd. depending on the degree of methoxy substitution.

L11 ANSWER 11 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:799976 CAPLUS
DOCUMENT NUMBER: 134:57251
TITLE: The role of adsorption of aniline trimers on the corrosion inhibition process: a ZINDO/1 study
AUTHOR(S): Sein, L. T., Jr.; Wei, Yen; Jansen, S. A.
CORPORATE SOURCE: Department of Chemistry, Temple University, Philadelphia, PA, 19122, USA
SOURCE: Computational and Theoretical Polymer Science (2000), Volume Date 2001, 11(2), 83-88
CODEN: CTPSFJ; ISSN: 1089-3156
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB The semi-empirical ZINDO/1 method was used to calc. the electronic **structure** and thermodn. properties of aniline trimers, leucoemeraldine, emeraldine dihydrochloride, emeraldine, and pernigraniline adsorbed onto cluster models of the Al(100) and Fe(100) surfaces. The effects of progressive oxidn. and protonation of the trimers on corrosion inhibition are interpreted in terms of these calcns. The interaction of aniline trimers with and Fe surface is far greater than with an Al surface. The ability of emeraldine dihydrochloride to lower the HOMO of the Fe cluster is a significant factor in the ability to inhibit corrosion. The **oligoanilines** and polyaniline conducting polymers are of interest in development of semiconductor electrodes and anticorrosion coatings.

L11 ANSWER 12 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:589189 CAPLUS
DOCUMENT NUMBER: 133:341887
TITLE: Structural and spectroscopic characterizations of oligoaniline thin films
AUTHOR(S): Corraze, B.; Quillard, S.; Morvan, H.; Boyer, M. I.
CORPORATE SOURCE: Institut des Materiaux de Nantes, Nantes, 44322, Fr.
SOURCE: Thin Solid Films (2000), 372(1,2), 54-59
CODEN: THSFAP; ISSN: 0040-6090
PUBLISHER: Elsevier Science S.A.
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ST **structure** spectroscopic characterization **oligoaniline** thin film

L11 ANSWER 13 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:271015 CAPLUS
DOCUMENT NUMBER: 133:31155
TITLE: Systematic study of the influence of several parameters on physicochemical properties of oligoanilines and their derivatives
AUTHOR(S): Vaschetto, Mariana E.; Retamal, Bernardo A.
CORPORATE SOURCE: Departamento de Quimica y Fisica, Universidad Nacional de Rio Cuarto, Rio Cuarto, 5800, Argent.
SOURCE: International Journal of Polymeric Materials (1999), 44(3-4), 317-340
CODEN: IJPMCS; ISSN: 0091-4037
PUBLISHER: Gordon & Breach Science Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB In this work we study the influence of asymmetry, chain length, oxidn. state, counterions and substituents groups over the physicochem. properties of **oligoanilines**. We present some semiempirical quantum chem. calcns. of optimized **structures**, charge distributions, energy gaps and enthalpies of formation (.DELTA.Hf) for aniline oligomers in different oxidn. states using the AM1 method. Also, substituted **structures** are calcd. The substituents studied are methoxy, Me and cyano groups located at positions 2 or 3 in the benzenoid ring. Methoxy substituted tetraanilines show hydrogen bridge formation; therefore, these are the most stable **structures**. The cyano group (.sigma.-.pi. acceptor) induces a lowering of charge on the terminal amine group in all oxidn. states. Our calcns. show that a linear relationship exists between charge on terminal amine group and the IP, having different slope values depending on the substituents position. Theor. energy gaps and exptl. ones (from refs.) display a quite linear relationship. Tetraanilines substituted with cyano groups show the lowest energy gap and is the most interesting material that we have studied. Moreover, charged **structures** have been analyzed. Calcns. on radical cation and dication **structures** are introduced. The influence of the counterions on the electronic properties of charged **structures** is presented.

L11 ANSWER 14 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:87670 CAPLUS
DOCUMENT NUMBER: 132:194791
TITLE: A self-doped oligoaniline with two stable redox couples in a wide pH range
AUTHOR(S): Yamamoto, Kimihisa; Taneichi, Daiki
CORPORATE SOURCE: Dep. Chemistry, Faculty Science Technology, Keio Univ., Yokohama, 223, Japan
SOURCE: Macromolecular Chemistry and Physics (2000), 201(1), 6-11
CODEN: MCHPES; ISSN: 1022-1352
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB 2,3-Dicarboxyaniline in its anionic state is oxidatively polymd. in aq. soln. by Na2S2O8 as an oxidant to yield oligo(2,3-dicarboxyaniline) as a novel **oligoaniline**. XPS anal. reveals that the **structure** of the resulting oligomers is 61% quinoid and 39% benzenoid with ca. 21% self-doping degree. The resulting **oligoaniline** shows two stable redox couples over a wide pH range on the electrode. Both redox processes involve 1 electron transfer with 1 proton transfer in each 2 monomer units, a redox chem. that is quite

distinct from conventional polyaniline. The redox activity of the resulting polymer in pseudo-neutral conditions is caused by the carboxy group with high d. which acts as a proton source for the protonation on the nitrogen atom of the polyaniline chain.

L11 ANSWER 15 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:6816 CAPLUS
DOCUMENT NUMBER: 132:108685
TITLE: Synthesis of monodisperse phenyl-capped oligoaniline pentamer and hexamer in the leucoemeraldine oxidation state and EB state and its UV studies
AUTHOR(S): Gao, Jun-Bo; Li, Ke; Sun, Hui; Yu, You-Hai; Wang, Ce; Wu, Zhong-Wen; Zhang, Wan-Jin
CORPORATE SOURCE: Department of Chemistry, Jilin University, Changchun, 130023, Peop. Rep. China
SOURCE: Gaodeng Xuexiao Huaxue Xuebao (1999), 20(12), 1960-1964
CODEN: KTHPDM; ISSN: 0251-0790
PUBLISHER: Gaodeng Jiaoyu Chubanshe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
IT 125597-21-9P, Benzenamine, hexamer 165260-61-7P, Benzenamine, pentamer
RL: SPN (Synthetic preparation); PREP (Preparation)
(emeraldine **structure**; synthesis of monodisperse phenyl-capped **oligoaniline** pentamer and hexamer)

L11 ANSWER 16 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:459797 CAPLUS
DOCUMENT NUMBER: 131:214864
TITLE: Optical properties of C60-derived star-burst oligoanilines
AUTHOR(S): Anantharaj, Vijayaraj; Ho, Edna; Wang, Lee Y.; Chiang, Long Y.
CORPORATE SOURCE: Center for Condensed Matter Sciences, Taiwan University, Taipei, Taiwan
SOURCE: Synthetic Metals (1999), 101(1-3), 791-792
CODEN: SYMEDZ; ISSN: 0379-6779
PUBLISHER: Elsevier Science S.A.
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
IT 25233-30-1D, Polyaniline, fullerene deriv.
RL: PRP (Properties)
(of emeraldine **structure**; UV-visible and fluorescence spectra of fullerene-C60 star-burst **oligoaniline** derivs.)

L11 ANSWER 17 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1997:540285 CAPLUS
DOCUMENT NUMBER: 127:148792
TITLE: Substituents Effect on the Electronic Properties of Aniline and Oligoanilines
AUTHOR(S): Vaschetto, Mariana E.; Retamal, Bernardo A.
CORPORATE SOURCE: Departamento de Quimica y Fisica Facultad de Ciencias Exactas Fisicoquimicas y Naturales, Universidad Nacional de Rio Cuarto, Rio Cuarto, 5800, Argent.
SOURCE: Journal of Physical Chemistry A (1997), 101(37), 6945-6950
CODEN: JPCAFH; ISSN: 1089-5639
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Aniline oligomers have been intensively studied in the past years. In

particular, aniline oligomers substituted with electron-donor groups have been synthesized and its electronic properties calcd. However, when an electron-acceptor group is attached to the benzenoid ring of the **oligoaniline**, strong effects over its electronic properties are expected to happen. In this work some semiempirical quantum chem. calcns. of geometric **structures**, and energy level distribution of aniline and substituted anilines and its corresponding oligomer are presented. Geometry calcns. of aniline and **oligoanilines** have been performed by using the PM3 and AM1 methods. Energy calcns. and UV-vis spectra have been done by using the ZINDO/S-CI method. The studied substituents are methoxy, Me, fluorine, nitro, and cyano groups, located at positions 2 or 3, in the benzenoid ring. This series of substituent groups involves a large range of .sigma.-.pi. electron-donor-acceptor capability. The methoxy and the nitro substituted tetranilines show an interaction between the oxygen of the substituent and the nitrogen of the oligomer through an hydrogen atom. These hydrogen bonds modify largely the **structure** of the oligomers. Particularly nitro groups show the strongest electrostatic attraction between hydrogen and oxygen. The cyano and the nitro groups (.sigma.-.pi. acceptor) induce an increasing of the ionization potential. Theor. anal. of the orbital energies of mols. substituted with electron-acceptor groups shows a lowering of the LUMO energy values larger than those in the HOMOs cases. A decreasing of the energy of the first optical transition when the electron acceptor capability of the substituent increases is shown. Tetranilines substituted with nitro groups display a band around 380 nm in the calcd. UV-vis spectrum. Thus, **oligoanilines** substituted with electron-acceptor groups (esp. nitro groups) show the lowest energy gap and they are the most encouraging material for semiconducting applications that we have studied.

ST electronic **structure** aniline **oligoaniline** MO

IT Molecular **structure**
(optimized; semiempirical MO study of substituents effect on the electronic properties of aniline and **oligoanilines**)

IT AM1 MO (molecular orbital)
Electronic **structure**
Electronic transition
FMO (molecular orbital)
PM3 (molecular orbital)
Substituent effects
(semiempirical MO study of substituents effect on the electronic properties of aniline and **oligoanilines**)

L11 ANSWER 18 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:233501 CAPLUS
DOCUMENT NUMBER: 126:264713
TITLE: Electrochromic properties of vacuum-evaporated polyaniline films
AUTHOR(S): Ivanov, V. F.; Nekrasov, A. A.; Gribkova, O. L.; Vannikov, A. V.
CORPORATE SOURCE: Frumkin Institute of Electrochemistry, Russian Academy of Sciences, Leninskii Prospect 31, Moscow, 117071, Russia
SOURCE: Synthetic Metals (1996), 83(3), 249-251
CODEN: SYMEDZ; ISSN: 0379-6779
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The emeraldine base was deposited on SnO2 glass substrates in vacuum by thermal evapn. in the temp. range 275-325 .degree.C. The as-deposited films differ dramatically from the native polyaniline and are formed by the redn. of **oligoanilines** with mol. wt. about 1500. The cycling acid-base treatment of vacuum thermally deposited films gives rise to formation of polyaniline-like material. The property restoration of

sublimed films is apparently detd. by the restoration of 3D assocs. in the film body. Mol. **structure** defects in vacuum-deposited films are responsible for the lower rates of coloration/decoloration, the lower contribution to imine formation and irreversible injection of anodic charge under the first oxidn./redn. cycle. The lower imine concn. in sublimed polyaniline films results in more coloration/decoloration cycles.

L11 ANSWER 19 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1995:355115 CAPLUS
DOCUMENT NUMBER: 122:162329
TITLE: Conductivity, thermoelectric power and field-effect mobility in self-assembled films of polyanilines and oligoanilines
AUTHOR(S): Paloheimo, J.; Laakso, K.; Isotalo, H.; Stubb, H.
CORPORATE SOURCE: VTT Electronics, Electronic Materials and Components, Technical Research Centre of Finland, Otakaari 7B, Espoo, FIN-02150, Finland
SOURCE: Synthetic Metals (1995), 68(3), 249-57
CODEN: SYMEDZ; ISSN: 0379-6779
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Thin conducting films of polyanilines and **oligoanilines** were deposited by using a layer-by-layer self-assembly process. Cond., thermoelec. power, and field-effect measurements were performed on the films. The highest conductivities were around 1 S.cntdot.cm-1 at room temp. The cond. was studied as a function of temp. and obeyed the T -1/2 law of variable-range hopping. The thermoelec. power of the films was initially n-type in air at room temp., but changed its sign to p-type under vacuum or with time. A linear temp. dependence was obsd. and related to the contribution from metallic polymer-chain segments. The field effect, measured using thin-film transistor **structures**, was always n-type and the field-effect mobilities were about 10-6-10-3 cm2 V-1 s-1. The Coulomb-gap model gives a good description of the system still lacking an expression for the field effect.

L11 ANSWER 20 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1989:31502 CAPLUS
DOCUMENT NUMBER: 110:31502
TITLE: Fluoran derivatives having **oligoaniline structure** and color-forming recording materials containing them
INVENTOR(S): Yoshinaka, Shinji; Onishi, Yutaka; Obitsu, Takeo
PATENT ASSIGNEE(S): Shin Nisso Kako Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63159384	A2	19880702	JP 1986-305430	19861223

PRIORITY APPLN. INFO.: JP 1986-305430 19861223
OTHER SOURCE(S): MARPAT 110:31502
TI Fluoran derivatives having **oligoaniline structure** and color-forming recording materials containing them

L11 ANSWER 21 OF 21 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1988:407211 CAPLUS
DOCUMENT NUMBER: 109:7211
TITLE: **Oligoaniline structure**

AUTHOR(S): Gadzhiev, G. G.; Kasumov, F. Kh.; Seiidov, M. A.; Ragimov, A. V.
CORPORATE SOURCE: Azerb. Med. Inst., Baku, USSR
SOURCE: Doklady - Akademiya Nauk Azerbaidzhanskoi SSR (1987), 43(8), 50-5
CODEN: DAZRA7; ISSN: 0002-3078
DOCUMENT TYPE: Journal
LANGUAGE: Russian
TI **Oligoaniline structure**

=> d his full

(FILE 'HOME' ENTERED AT 16:17:52 ON 17 SEP 2003)

FILE 'REGISTRY' ENTERED AT 16:18:00 ON 17 SEP 2003
L1 0 SEA ABB=ON PLU=ON ANILINE/RN
E ANILINE/CN
E ANILINEAMINE
E ANILINE
E ANILINE/CN
L2 1 SEA ABB=ON PLU=ON ANILINE/CN
D L2

FILE 'CAPLUS' ENTERED AT 17:04:20 ON 17 SEP 2003
L3 STRUCTURE UPLOADED
S L3

FILE 'REGISTRY' ENTERED AT 17:04:45 ON 17 SEP 2003
L4 17 SEA SSS SAM L3

FILE 'CAPLUS' ENTERED AT 17:04:45 ON 17 SEP 2003
L5 25 SEA ABB=ON PLU=ON L4
D L5
D L5 2-25
L6 95868 SEA ABB=ON PLU=ON ANILINE
L7 11213 SEA ABB=ON PLU=ON ANILINE (P) (HYDROXYL OR HYDROXY OR AMINE OR AMIDE OR CARBOXYL)
L8 13 SEA ABB=ON PLU=ON OLIGOANILINE (P) (HYDROXYL OR HYDROXY OR AMINE OR AMIDE OR CARBOXYL)
D L8 IBIB KWIC 1-

FILE 'REGISTRY' ENTERED AT 17:10:23 ON 17 SEP 2003
E OLIGOANILINE/CN
L9 0 SEA ABB=ON PLU=ON OLIGOANILINE

FILE 'CAPLUS' ENTERED AT 17:11:00 ON 17 SEP 2003
L10 110 SEA ABB=ON PLU=ON OLIGOANILINE
L11 21 SEA ABB=ON PLU=ON L10 (P) (FORMULA OR STRUCTURE)
D L11 IBIB KWIC 1-

L6 ANSWER 1 OF 42 CAPLUS COPYRIGHT 2003 ACS
AN 2002:711384 CAPLUS
DN 137:232459
TI Preparation of multioligoanilinated fullerenes as photodynamic therapeutic agents to inhibit tumor growth
IN Chiang, Long Y.
PA Taiwan
SO U.S., 8 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6452037	B1	20020917	US 2001-840323	20010423
EP 1253139	A2	20021030	EP 2002-9029	20020423
R: AT, BE, CH, DE, DK, ES; FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003012624	A2	20030115	JP 2002-120491	20020423
PRAI US 2001-840323	A	20010423		

OS MARPAT 137:232459
RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 42 CAPLUS COPYRIGHT 2003 ACS
AN 2002:626510 CAPLUS
DN 137:286691
TI Study on crystalline behavior of doped parent aniline tetramer by HREM
AU Chen, Liang; Yu, Youhai; Mao, Huaping; Wang, Ce; Zhou, Yunchun; Zhang, Wanjin
CS Department of Chemistry, Jilin University, Changchun, 130023, Peop. Rep. China
SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (2002), 43(2), 1266
CODEN: ACPPAY; ISSN: 0032-3934
PB American Chemical Society, Division of Polymer Chemistry
DT Journal; (computer optical disk)
LA English
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 42 CAPLUS COPYRIGHT 2003 ACS
AN 2002:485214 CAPLUS
DN 137:170101
TI Spectroscopic and Spectroelectrochemical Properties of a Poly(alkylthiophene)-Oligoaniline Hybrid Polymer
AU Dufour, B.; Rannou, P.; Travers, J. P.; Pron, A.; Zagorska, M.; Korc, G.; Kulszewicz-Bajer, I.; Quillard, S.; Lefrant, S.
CS Laboratoire de Physique des Metaux Synthetiques, CEA-Grenoble, UMR 5819-SPrAM (CEA-CNRS-Universite J. Fourier-Grenoble I), DRFMC, Grenoble, 38054, Fr.
SO Macromolecules (2002), 35(16), 6112-6120
CODEN: MAMOBX; ISSN: 0024-9297
PB American Chemical Society
DT Journal
LA English
RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 42 CAPLUS COPYRIGHT 2003 ACS
AN 2002:388064 CAPLUS
DN 137:94304
TI Nature of Protons, Phase Transitions, and Dynamic Disorder in Poly- and

Oligoaniline Bases and Salts: An Inelastic Neutron Scattering Study
AU El Khalki, A.; Colomban, Ph.; Hennion, B.
CS Nanophases and Heteregeneous Solids Group, LADIR UMR 7075 CNRS, University Pierre et Marie Curie, Thiais, 94320, Fr.
SO Macromolecules (2002), 35(13), 5203-5211
CODEN: MAMOBX; ISSN: 0024-9297
PB American Chemical Society
DT Journal
LA English
RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 42 CAPLUS COPYRIGHT 2003 ACS
AN 2001:259558 CAPLUS
DN 135:116136
TI Non-aqueous capillary electrophoresis using non-dissociating solvents. Application to the separation of highly hydrophobic oligomers
AU Cottet, H.; Struijk, M. P.; Van Dongen, J. L. J.; Claessens, H. A.; Cramers, C. A.
CS Department of Chemical Engineering, Laboratory of Instrumental Analysis, Eindhoven University of Technology, Eindhoven, 5600 MB, Neth.
SO Journal of Chromatography, A (2001), 915(1-2), 241-251
CODEN: JCRAEY; ISSN: 0021-9673
PB Elsevier Science B.V.
DT Journal
LA English
RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 42 CAPLUS COPYRIGHT 2003 ACS
AN 2000:860656 CAPLUS
DN 134:148190
TI Homo- and copolymerisation of ring-substituted alkyl anilines. Theoretical estimation of monomer reactivity.
AU Gospodinova, N. P.; Tadjer, A. V.; Madjarova, G. K.; Mokreva, P. T.; Terlemezyan, L. K.
CS Institute of Polymers, Bulgarian Academy of Sciences, Sofia, 1113, Bulg.
SO Bulgarian Chemical Communications (2000), 32(1), 72-79
CODEN: BCHCE4; ISSN: 0324-1130
PB Bulgarian Academy of Sciences and the Bulgarian Chemical Society
DT Journal
LA English
RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 42 CAPLUS COPYRIGHT 2003 ACS
AN 2000:830574 CAPLUS
DN 133:351572
TI Manufacture of functional coatings using phenyl-ended aniline tetramer as anticorrosive additive
IN Zhang, Wanjin; Gao, Junbo; Li, Ke; Wang, Ce; Yu, Youhai; Wu, Zhongwen
PA Jielin University, Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 5 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1250792	A	20000419	CN 1999-120966	19991018
PRAI	CN 1999-120966		19991018		

L6 ANSWER 8 OF 42 CAPLUS COPYRIGHT 2003 ACS
AN 2000:633847 CAPLUS

DN 133:341863
TI Dichroism induced by photoisomerization of aniline tetramers in polymeric films
AU Mendonca, Cleoer R.; dos Santos, David S., Jr.; De Boni, Leonardo; Balogh, Deborah T.; Oliveira, Osvaldo N., Jr.; Zilio, Sergio C.
CS Instituto de Fisica de Sao Carlos Universidade de Sao Paulo, Sao Carlos, 13560-970, Brazil
SO Advanced Materials (Weinheim, Germany) (2000), 12(15), 1126-1129
CODEN: ADVMEW; ISSN: 0935-9648
PB Wiley-VCH Verlag GmbH
DT Journal
LA English
RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 9 OF 42 CAPLUS COPYRIGHT 2003 ACS
AN 2000:594189 CAPLUS
DN 133:310239
TI Stabilization and anti-corrosion property of phenyl-capped and aniline tetramer as additives to common coating
AU Wang, Ce; Gao, Junbo; Chen, Chunhai; Qiu, He; Yu, Youhai; Chen, Liang; Wu, Zhongwen; Zhang, Wanjin
CS Chemistry Department, Jilin University, Changchun, 130023, Peop. Rep. China
SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (2000), 41(2), 1746-1747
CODEN: ACPPAY; ISSN: 0032-3934
QD281.P6 A53
PB American Chemical Society, Division of Polymer Chemistry
DT Journal
LA English
RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 42 CAPLUS COPYRIGHT 2003 ACS
AN 2000:345019 CAPLUS
DN 133:164582
TI HREELS study of ultra-thin polyaniline films grown on Cu(110) by vapor deposition of aniline tetramers
AU Lee, K. K.; Vohs, J. M.; DiNardo, N. J.
CS Department of Chemical Engineering, University of Pennsylvania, Philadelphia, PA, 19104, USA
SO Synthetic Metals (2000), 113(3), 231-236
CODEN: SYMEDZ; ISSN: 0379-6779
PB Elsevier Science S.A.
DT Journal
LA English
RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 11 OF 42 CAPLUS COPYRIGHT 2003 ACS
AN 2000:271015 CAPLUS
DN 133:31155
TI Systematic study of the influence of several parameters on physicochemical properties of oligoanilines and their derivatives.
AU Vaschetto, Mariana E.; Retamal, Bernardo A.
CS Departamento de Quimica y Fisica, Universidad Nacional de Rio Cuarto, Rio Cuarto, 5800, Argent.
SO International Journal of Polymeric Materials (1999), 44(3-4), 317-340
CODEN: IJPMCS; ISSN: 0091-4037
PB Gordon & Breach Science Publishers
DT Journal
LA English
RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 12 OF 42 CAPLUS COPYRIGHT 2003 ACS
AN 2000:181994 CAPLUS
DN 132:294227
TI Solid-state structure of optically active polyaniline
AU Espe, Matthew P.; Gates, Bryan M.; Schmeida, P. Michael
CS Department of Chemistry, The University of Akron, Akron, OH, 44325, USA
SO Polymeric Materials Science and Engineering (2000), 82, 138
CODEN: PMSEDG; ISSN: 0743-0515
PB American Chemical Society
DT Journal
LA English
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

TP156.C57 A5
TO MAIN

L6 ANSWER 13 OF 42 CAPLUS COPYRIGHT 2003 ACS
AN 2000:153448 CAPLUS
DN 132:322370
TI Chain length effect on intrachain electronic excitation and interchain coupling in poly- and oligo-anilines
AU Folch, S.; Regis, A.; Gruger, A.; Colomban, P.
CS UPR 1580 CNRS, Laboratoire de Dynamique, Interactions et Reactivite, Thiais, 94320, Fr.
SO Synthetic Metals (2000), 110(3), 219-227
CODEN: SYMEDZ; ISSN: 0379-6779
PB Elsevier Science S.A.
DT Journal
LA English
RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 14 OF 42 CAPLUS COPYRIGHT 2003 ACS
AN 1999:573852 CAPLUS
DN 131:299785
TI A novel synthetic method to phenyl-capped penta- and hexaaniline
AU Gao, Jun Bo; Zhang, Wan Jin; Li, Ke; Wang, Ce; Wu, Zhong Wen; Ji, Yi Ping
CS Chemistry Dep., Jilin Univ., Changchun, 130023, Peop. Rep. China
SO Macromolecular Rapid Communications (1999), 20(9), 463-466
CODEN: MRCOE3; ISSN: 1022-1336
PB Wiley-VCH Verlag GmbH
DT Journal
LA English
RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 15 OF 42 CAPLUS COPYRIGHT 2003 ACS
AN 1999:559078 CAPLUS
DN 132:181144
TI Chemical oxidation and electrochemical oxidation on phenyl-capped oligoanilines
AU Gao, Junbo; Jin, Jian; Zhang, Wanjin; Li, Ke; Yu, Youhai; Wang, Ce; Wu, Zhongwen; Wei, Zhanhai; Ji, Yiping
CS Chemistry Department, Jinlin University, Changchun, 130023, Peop. Rep. China
SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1999), 40(2), 815
CODEN: ACPPAY; ISSN: 0032-3934
PB American Chemical Society, Division of Polymer Chemistry
DT Journal
LA English
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 16 OF 42 CAPLUS COPYRIGHT 2003 ACS

AN 1999:559034 CAPLUS
DN 132:167293
TI Optical storage in aniline oligomers
AU Dos Santos, D. S., Jr.; Mendonca, C. R.; Balogh, D. T.; De Boni, L.; Zilio, S. C.; Oliveira, O. N., Jr.
CS Instituto de Fisica de Sao Carlos, Universidade de Sao Paulo, Sao Carlos, 13560-970, Brazil
SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1999), 40(2), 730-731
CODEN: ACPPAY; ISSN: 0032-3934
PB American Chemical Society, Division of Polymer Chemistry
DT Journal
LA English
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 17 OF 42 CAPLUS COPYRIGHT 2003 ACS
AN 1999:552136 CAPLUS
DN 131:299791
TI Electrochemical polymerization of aniline investigated using on-line electrochemistry/electrospray mass spectrometry
AU Deng, Haiteng; Van Berkel, Gary J.
CS Chemical and Analytical Sciences Division, Oak Ridge National Laboratory, Oak Ridge, TN, 37831-6365, USA
SO Analytical Chemistry (1999), 71(19), 4284-4293
CODEN: ANCHAM; ISSN: 0003-2700
PB American Chemical Society
DT Journal
LA English
RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 18 OF 42 CAPLUS COPYRIGHT 2003 ACS
AN 1999:459787 CAPLUS
DN 131:200474
TI EPR of mesoscale polyanilines
AU Brenneman, K. R.; Feng, J.; Zhou, Y.; MacDiarmid, A. G.; Kahol, P. K.; Epstein, A. J.
CS Chemical Physics Program, The Ohio State University, Columbus, OH, 43210-1106, USA
SO Synthetic Metals (1999), 101(1-3), 785-786
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AU Rei Vilar, M.; Folch, S.; Chenouffi, M.; Gruger, A.; Colomban, Ph.
CS LADIR- UPR1580 CNRS 2, Thiais, 94320, Fr.
SO Synthetic Metals (1999), 101(1-3), 650-651
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AU MacDiarmid, Alan G.; Zhou, Yao; Feng, Jing
CS Department of Chemistry, University of Pennsylvania, PA, 19104, USA
SO Synthetic Metals (1999), 100(1), 131-140
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AU MacDiarmid, A. G.; Zhou, Y.; Feng, J.; Furst, G. T.; Shedlow, A. M.
CS Chemistry Department, University of Pennsylvania, Philadelphia, PA, USA
SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1999), 40(1), 246-247
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AU Maeda, Yuji; Yoshida, Yasuhiko; Hasebe, Yasushi; Uchiyama, Shunichi
CS Faculty of Engineering, Toyo University, Saitama, 350, Japan
SO Chemical Sensors (1997), 13(Suppl. B, Proceedings of the 25th Chemical Sensor Symposium, 1997), 1-4
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AU Boyer, M. I.; Quillard, S.; Louarn, G.; Lefrant, S.; Rebourt, E.; Monkman, A.
CS Laboratoire de Physique Cristalline, Institut des Materiaux, Universite de Nantes, Nantes, 44322, Fr.
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AU Folch, S.; Gruger, A.; Colomban, Ph.
CS CNRS, LASIR, Thiais, 94320, Fr.
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IN MacDiarmid, Alan G.; Zhang, Wanjin; Feng, Jing
PA The Trustees of the University of Pennsylvania, USA; MacDiarmid, Alan G.; Zhang, Wanjin; Feng, Jing
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W: AU, CA, CN, JP, NZ, US, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
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CS Institute of Physics, Bhubaneswar, India
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AU Vaschetto, Mariana E.; Retamal, Bernardo A.
CS Departamento de Quimica y Fisica Facultad de Ciencias Exactas Fisicoquimicas y Naturales, Universidad Nacional de Rio Cuarto, Rio Cuarto, 5800, Argent.
SO Journal of Physical Chemistry A (1997), 101(37), 6945-6950
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CS Facultad de Quimica y Biologia, Universidad de Santiago de Chile, Santiago, Chile
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AU Zhang, W. J.; Feng, J.; MacDiarmid, A. G.; Epstein, A. J.
CS Department of Chemistry, University of Pennsylvania, Philadelphia, PA, 19104-6323, USA
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AU Monkman, A. P.; Rebourt, E.; Petr, A.
CS OEM Group, Department of Physics, University of Durham, Durham, UK
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AU Rebourt, E.; Joule, J. A.; Monkman, A. P.
CS Organic Electroactive Materials Research Group, Department of Physics, University of Durham, South Road, Durham, DH1 3LE, UK
SO Synthetic Metals (1997), 84(1-3), 65-66
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AU Pereira, E. C.; Longo, E.; Bulhoes, L. O. S.
CS LIEC - Departamento de Quimica, Universidade Federal de Sao Carlos, Caixa Postal 676, Sao Carlos, SP, 13565-905, Brazil
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CS Facultad de Ciencia, Universidad de Santiago de Chile, Santiago, Chile
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AU Sales, Tasso R. M.; De Melo, Celso P.; Dos Santos, Maria Cristina
CS Dep. Fis., Univ. Fed. Pernambuco, Recife, 50739, Brazil
SO Synthetic Metals (1991), 43(3), 3751-4
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TI Structural determination of a semiconductive tetramer of aniline by IR, UV-visible, ESR, XPS and mass spectroscopy techniques
AU Nalwa, Hari Singh
CS Mater. Syst. Eng., Tokyo Univ. Agric. Technol., Koganei, 184, Japan
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AU Javadi, H. H. S.; Treat, S. P.; Ginder, J. M.; Wolf, J. F.; Epstein, A. J.
CS Dep. Phys., Ohio State Univ., Columbus, OH, 43210-1106, USA
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AU Watanabe, Akira; Mori, Kunio; Iwasaki, Yasunori; Murakami, Shuuji; Nakamura, Yoshiro
CS Fac. Eng., Iwate Univ., Morioka, 020, Japan
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AU Wei, Yen; Tang, Xun; Sun, Yan; Focke, Walter W.
CS Dep. Chem., Drexel Univ., Philadelphia, PA, 19104, USA
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AU Wei, Yen; Hsueh, Kesyin; Tang, Xun; Sun, Yan
CS Dep. Chem., Drexel Univ., Philadelphia, PA, 19104, USA
SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1989), 30(1), 226-7
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AU Tang, Xun; Sun, Yan; Wei, Yen
CS Dep. Chem., Drexel Univ., Philadelphia, PA, 19104, USA
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CS Dep. Phys. Measur. Technol., Linkoping Univ., Linkoping, S-581 83, Swed.
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